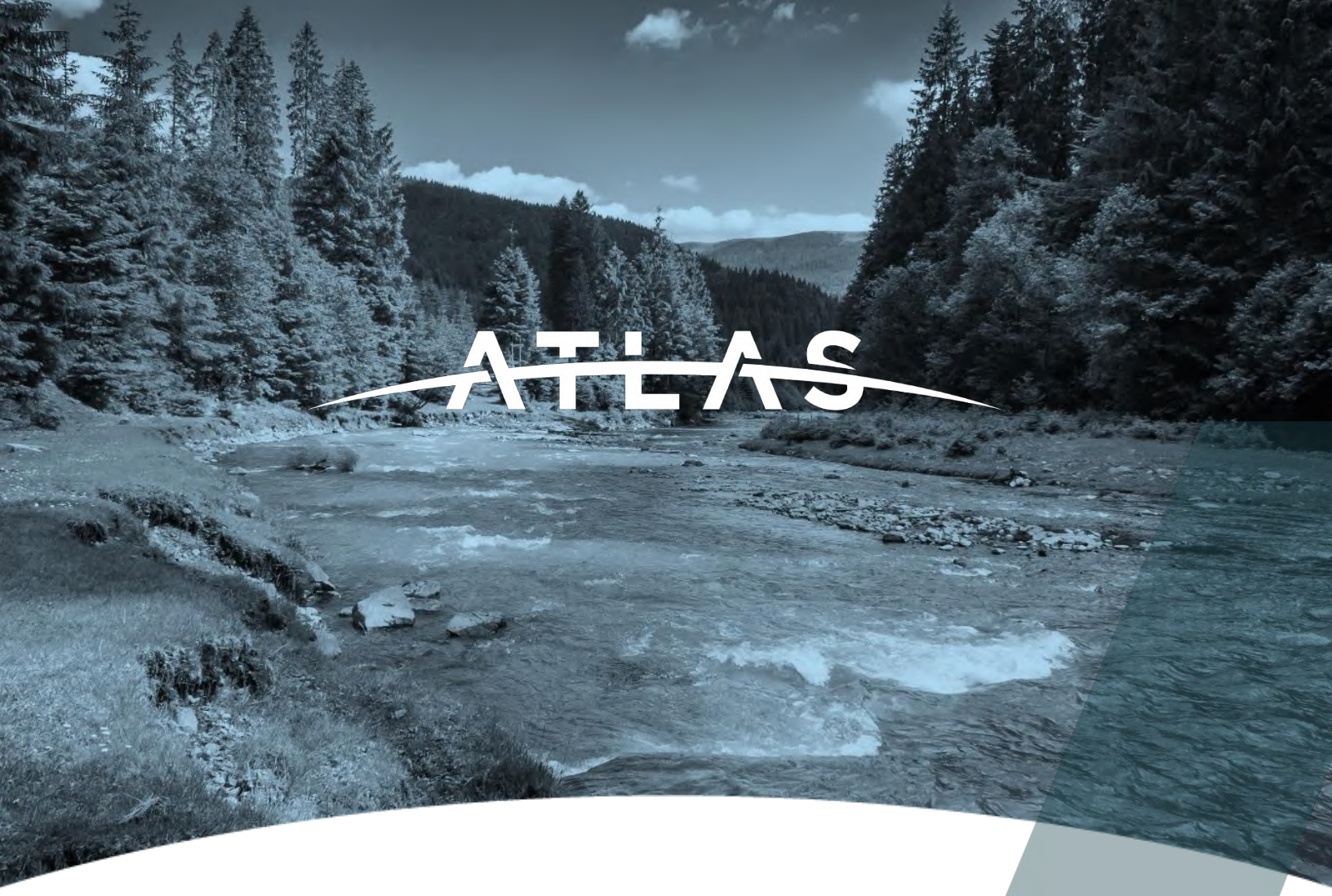

PHASE V COMPLETION AND PERMANENT SOLUTION WITH NO CONDITIONS STATEMENT

RTN-3-3072

MOBIL STATION NO. 1436
309 LOWELL STREET, ANDOVER, MASSACHUSETTS

PREPARED FOR:

Global Companies LLC
800 South St., Ste. 500
Waltham, MA 02453

PREPARED BY:

ATC Group Service LLC dba Atlas Technical
10 State Street, Suite 100
Woburn, MA 01801

August 21, 2023

CONTENTS

1. INTRODUCTION 1
2. DISPOSAL SITE CONTACTS 1
3. GENERAL DISPOSAL SITE INFORMATION 2
   - 3.1 Location 2
   - 3.2 Description 2
   - 3.3 Property History and Release Description 3
   - 3.4 Regulatory Status 3
4. SITE INVESTIGATION 3
   - 4.1 Groundwater Sampling 3
   - 4.2 Soil Borings 3
5. SITE GEOLOGY AND HYDROGEOLOGY 4
6. NATURE AND EXTENT OF OHM AND CONCEPTUAL SITE MODEL 4
   - 6.1 Characterization of Source(s) of OHM 4
   - 6.2 Delineation of OHM Impact 5
   - 6.3 Exposure Points 5
   - 6.4 Contaminants of Concern 6
   - 6.5 Exposure Point Concentrations 6
     - 6.5.1 Soil 6
     - 6.5.2 Soil Hot Spots 6
     - 6.5.3 Groundwater 7
   - 6.6 Conceptual Site Model (CSM) 7
7. EXPOSURE ASSESSMENT 7
   - 7.1 Current and Foreseeable Disposal Site Activities and Use 7
   - 7.2 Soil Categorization 7
   - 7.3 Groundwater Categorization 8
   - 7.4 Hazard Identification 8
8. METHOD 1 RISK CHARACTERIZATION 8
   - 8.1 Characterization of Risk to Human Health 9
     - 8.1.1 Applicable or Suitably Analogous Public Health Standards 9
     - 8.1.2 Upper Concentration Limits 9
     - 8.1.3 Uncertainty Analysis 9
     - 8.1.4 Human Health Risk Conclusions 10
   - 8.2 Characterization of Risk to the Environment 10
     - 8.2.1 Environmental Receptor/Habitat Evaluation 10
   - 8.3 Characterization of Risk to Safety 11
   - 8.4 Characterization of Risk to Public Welfare 11

9. LIGHT NONAQUEOUS PHASE LIQUID MOBILITY [310 CMR 40.1056(2)(E)] 12
9.1 Introduction 12
9.2 Disposal Site History 12
9.3 Gauging Data 12
9.4 Monitoring Well Network 12
9.5 Soil Borings 13
9.6 Geotechnical Data 13
9.7 VPH Data 13
9.8 Presence of LNAPL with Micro-Scale Mobility 13
9.9 Stability of LNAPL 13
9.10 Feasibility of Removing LNAPL 14
9.11 Achieving a Permanent Solution 14
10. REPRESENTATIVENESS AND DATA USABILITY ASSESSMENT 15
10.1 Data Representativeness Evaluation 15
10.1.1 Conceptual Site Model 15
10.1.2 Use of Field Screening Data 15
10.1.3 Number, Spatial Distribution, and Handling of Samples 15
10.1.4 Temporal Distribution of Samples 16
10.1.5 Completeness 16
10.1.6 Consistency and Uncertainty 16
10.1.7 Unrepresentative Data 16
10.2 Data Usability Assessment 16
11. PHASE V COMPLETION AND PERMANENT SOLUTION WITH NO CONDITIONS STATEMENT 17
11.1 General Disposal Site Information 17
11.2 Supporting Documentation for Permanent Solution with No Conditions 19
11.3 MCP Compliance Fee 23
12. SUMMARY AND CONCLUSIONS 23
13. LSP OPINION 23
14. PUBLIC INVOLVEMENT 24
15. LIMITATIONS 24

TABLES

Table 1 Summary of Groundwater Data - VPH
Table 2 Groundwater Exposure Point Concentrations
Table 3 Summary of Soil Data and Exposure Point Concentrations - VPH and Lead
Table 4 Summary of Soil Data Exposure Point Concentrations - EPH, Metals and PCBs

FIGURES

Figure 1 Site Locus Map
Figure 2 Aerial Overview Plan
Figure 3 Site Plan
Figure 4 Site Plan Detail

APPENDICES

Appendix A MassDEP Phase I Site Assessment Map
Appendix B Abbreviations and Acronyms
Appendix C Conceptual Site Model
Appendix D Historic Figures and Tables
Appendix E Laboratory Reports
Appendix F Drilling Logs
Appendix G Records of Climatological Observations
Appendix H Public Notification Correspondence

1. INTRODUCTION

ATC Group Services LLC dba Atlas Technical (Atlas) has prepared this Phase V Completion and Permanent Solution with No Conditions (PSNC) Statement on behalf of Global Companies LLC (Global), for the Disposal Site associated with RTN 3-3072 and linked RTNs 3-13955 and 3-21062. The Disposal Site is located at 309 Lowell Street, Andover, Massachusetts, hereinafter referred to as the Site. Figure 1 is a Site Locus Map, Figure 2 is an Aerial Overview Plan, and Figure 3 is a Site Plan. A Phase 1 Site Assessment Map is included as Appendix A.

Many abbreviations and acronyms common to the environmental industry and/or MassDEP are utilized throughout this report. A list defining the abbreviations and acronyms typically used in environmental documents is included as Appendix B. A CSM is provided in Appendix C.

The property first became a MassDEP-listed Site following the discovery of petroleum impacted soil and groundwater during the removal of a 550-gallon fuel oil UST in November 1989. The contaminants identified were characterized as being related to weathered gasoline. MassDEP assigned RTN 3-3072 to the Site.

To assess the potential risk of harm to human health, public welfare, safety, and the environment from the Disposal Site, Atlas completed a Method 1 Risk Characterization for current and foreseeable future Site activities and use. The risk characterization indicates that a condition of No Significant Risk exists, with no assumed limitations of site activities and use, and the submittal of a Permanent Solution with No Conditions Statement is appropriate.

Information required for a PSNC, as specified in the MCP at 310 CMR 40.1056, is contained in this document as a whole. This PSNC applies only to the release conditions associated with RTN 3-3072, as well as linked RTNs 3-13955 and 3-21062. In the opinion of the LSP named herein, the Response Action Performance Standard, as defined in the MCP, has been met in the performance of Response Actions to address RTN 3-3072, including the linked RTNs.

All documentation, plans and/or reports necessary to support this PSNC, as set forth in the MCP at 310 CMR 40.1056, are incorporated in this submittal, unless previously submitted to MassDEP as stipulated in 310 CMR 40.1056(2). Where deemed appropriate, previously submitted information is summarized and/or discussed or referenced within this report. These submittals are available on the MassDEP File Viewer website under RTNs 3-3072, 3-13955 and 3-21062. As each of the prior submittals may contain pertinent information not necessarily reiterated in this document, each should be reviewed for content and are herein included in this report by reference.

2. DISPOSAL SITE CONTACTS

In accordance with 310 CMR 40.1056(1)(i), Atlas provides the following Site information regarding the Potentially Responsible Party (PRP) and Licensed Site Professional (LSP) who are certifying this Phase V Completion and PSNC Statement. Refer to the associated BWSC forms for additional required information.

PRP:	Global Companies LLC
Contact:	Mr. Jason C. Frigon
	Environmental Project Manager
Address:	800 South Street, Suite 500
	Waltham, Massachusetts 02453
Telephone:	(978) 339-3545
e-mail:	jfrigon@globalp.com
LSP:	Mr. Daniel W. Felten
LSP Number:	7432
Company:	ATC Group Services LLC dba Atlas Technical
Address:	10 State Street, Suite 100
	Woburn, Massachusetts 01801
Telephone:	(781) 932-9400
e-mail:	daniel.felten@oneatlas.com

3. GENERAL DISPOSAL SITE INFORMATION

This Phase V Completion and PSNC Statement applies to RTN 3-3072 and linked RTNs 3-13955 and 3-21062. General information on the Disposal Site is provided below.

3.1 Location

The Site is located at 309 Lowell Street, on the northwestern side of Lowell Street (between Interstate Highway 93 and Greenwood Road), in a mixed residential, commercial and undeveloped area of Andover, Massachusetts. The location of the Disposal Site with respect to surrounding topography and physical features is depicted on Figure 1. An Aerial Overview Plan is provided as Figure 2, and a Site Plan is provided as Figure 3.

The approximate geographical location coordinates of the Disposal Site are 42° 38’ 57” North and 71° 10’ 58” West.

3.2 Description

The Site is a currently operating gasoline station and Dunkin’ restaurant. Based on investigations completed for RTNs 3-3072, 3-13955 and 3-21062, two source areas for COCs in soil and groundwater on the Site were identified, including: the vicinity of and downgradient from the UST area, characterized by petroleum hydrocarbons in vadose and saturated soils; and, the vicinity of and downgradient from a June 1996 release from an underground gasoline UST line flex connector. The horizontal extent of the Disposal Site is depicted on the Site Plan (Figure 3).

3.3 Property History and Release Description

Site history is summarized in the CSM (Appendix C). Historic tables and figures and provided in Appendix D.

3.4 Regulatory Status

The Disposal Site is currently in ROS. The Site regulatory history is summarized in the Conceptual Site Model (Appendix C). CRAs conducted at the Disposal Site are documented in submittals to MassDEP for RTN 3-3072 and linked RTNs, most recently in the submittal of the ROS Status Report on February 17, 2023. Response Actions conducted since February 2023 are summarized below in Section 4.

4. SITE INVESTIGATION

The results and findings of environmental investigations completed at the Site prior to February 2023 are documented in previous submittals for RTN 3-3072 and linked RTNs. Subsurface investigations completed in 2023, including the advancement of soil borings, are documented below.

Groundwater data are summarized in Table 1. Soil analytical data are summarized in Tables 3 and 4.

4.1 Groundwater Sampling

Groundwater samples were collected from select monitoring wells on March 27, 2023 and submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts for laboratory analysis of VPH according to the MassDEP VPH Method. Additionally, all samples were submitted for analysis of methane, nitrate, sulfate, dissolved iron, and dissolved manganese. All samples were collected and analyzed according to the current MassDEP CAM. This data has Presumptive Certainty for precision and accuracy. A review of PARCCS indicates that the data collected during the sampling event is of suitable quality to support the conclusions of this and future reports

Groundwater samples were collected from monitoring wells MW-1, MW-3, OW-ED, and OW-13. VPH C9-C10 aromatics were detected at OW-13 above the GW-1 standard, and MTBE was detected at OW-ED, below the GW-1 standard. No petroleum hydrocarbons were detected at any of the other locations sampled. Groundwater data are summarized in Table 1, and the laboratory report is provided in Appendix E. The locations of the monitoring wells are depicted on the Site Plan (Figure 3).

4.2 Soil Borings

On April 4, 2023, Atlas provided oversight for the advancement of six soil borings in the vicinity of the southern corner of the convenience store building. The locations of the soil borings were selected to evaluate subsurface conditions in areas where petroleum hydrocarbons were previously detected in soil during investigations completed in 1998 (AS-6), 2000 (MW-2D), 2002

(MW-5D), and 2003 (MW-5DD and VP-1). Martin Geo-Environmental LLC of Belchertown, Massachusetts utilized a vacuum rig and direct push drilling rig to advance the soil borings to a depth of approximately 20 ft below ground surface (ft bgs). The soil borings were labeled as SB-1 through SB-6 and are depicted on the Site Plan Detail (Figure 4).

During drilling, soil samples were collected at various intervals and were field screened for total organic vapors (TOVs) with a photoionization detector (PID) using the MassDEP soil jar headspace method. TOV readings ranged from non-detect to 764 ppmv. Soil consisted of tan to dark brown coarse to fine sand with gravel. Drilling logs are provided as Appendix F.

Soil data are summarized in Tables 3 and 4, and the laboratory report is provided in Appendix E. The determination of EPCs is documented in Section 6.5.

5. SITE GEOLOGY AND HYDROGEOLOGY

As stated in previous submittals for RTNs 3-3072, 3-13955 and 3-21062, soil consists of fill from grade to 9 ft bgs. Soils from 9 to 18 ft bgs consist of light to dark brown fine to coarse sand containing some gravel and silt. A cobble layer is located approximately 14 ft bgs. Based on the boring log for MW-5DD, installed in September 2002, bedrock is likely located approximately 50 ft bgs.

Bedrock at and near the Site is mapped as grey, medium- to coarse-grained sillimanite-garnet-biotite-muscovite granite of Silurian or Ordovician age from the Andover Pluton of the Sillimanite Zone (Zen, et. al., 1983).

As shown in Table 1, the depth to groundwater during the most recent groundwater sampling event (March 27, 2023) ranged from 6.43 to 8.55 ft bgs. Groundwater flow direction has historically been to the north.

6. NATURE AND EXTENT OF OHM AND CONCEPTUAL SITE MODEL

Information on the nature and extent of Site OHM is presented in the following subsections. A CSM is provided in Appendix C.

6.1 Characterization of Source(s) of OHM

The property first became a MassDEP-listed Site following the discovery of petroleum-impacted soil and groundwater during the removal of a 550-gallon fuel oil UST in November 1989. The contaminants identified were characterized as being related to weathered gasoline. MassDEP assigned RTN 3-3072 to the Site.

Based on investigations completed for RTNs 3-3072, 3-13955 and 3-21062, two source areas for COCs on the Site were identified, including the vicinity of and downgradient from the UST area, characterized as petroleum hydrocarbons in vadose and saturated soils, and the vicinity of and downgradient from a June 1996 release from an underground gasoline UST line flex connector. The Phase II CSA (GES, October 2003) stated that other potential sources of OHM include the existing gasoline USTs and associated dispensing system, the former used oil UST,

existing fuel oil UST, former and existing oil/water separator and former MDC trap associated with former service bay floor drains, and former surface water catch basin.

Based on current soil and groundwater data, no ongoing source of OHM has been identified.

6.2 Delineation of OHM Impact

Based on subsurface investigations and excavations completed between 1989 and 2023, the horizontal extent of the Disposal Site is limited to the area depicted on the Site Plan (Figure 3). Vertically, the Disposal Site extends from 5 to 15 ft bgs. Surface water bodies, wetlands, and indoor air have not been identified as current or potential future exposure points.

As shown on the Phase I Site Assessment Map (Appendix A), the Site is not located within the boundaries of a Potential or Non-Potential Drinking Water Source Area, Zone II Area, IWPA, or Medium or High Yield Potentially Productive Aquifer. No municipal drinking water supply wells or private groundwater production wells were identified within 500 ft of the Site. The closest surface water body is an unnamed drainage stream located approximately 100 ft to the northwest of the Site. However, the Site is located within a Zone A of a Class A surface water body.

The Site is located greater than 500 ft from areas designated as Protected Open Space, Areas of Critical Environmental Concern and Species of Special Concern, and Threatened or Endangered Species Habitats, Wetlands, Potential or Certified Vernal Pools and Outstanding Resource Waters. As such, no environmental or wildlife receptors were identified.

The Phase II CSA (GES, October 2003) concluded that surface water conditions related to the Disposal Site were consistent with a condition of No Significant Risk for human receptors and the environment. Based on decreasing trends of COCs in groundwater since 2003, it is not likely that current surface water impacts would be significant. Similarly, indoor air conditions were consistent with a condition of No Significant Risk for human receptors. Based on COC trends in groundwater, it is not likely that current indoor air impacts would be significant.

6.3 Exposure Points

As stated above in Section 6.2, the Disposal Site is limited to soil and groundwater, and surface water bodies, wetlands, and indoor air have not been identified as current or potential future exposure points. LNAPL was present during historic site investigations (i.e., September to November 2001 [IRA Completion Report, GES, November 14, 2001; RTN 3-21062]). As shown in Table 1, semi-annual and quarterly gauging events shows that since December 2001, no LNAPL has been identified at the Site.

Soil borings SB-1 through SB-6 were advanced in a very small area (see the Site Plan, Figure 3 and Site Plan Detail, Figure 4). Based on their close proximity to each other, the average concentrations of compounds detected in the soil borings are represented as a single sample location.

6.4 Contaminants of Concern

All petroleum hydrocarbons, metals and PCBs historically detected in soil above MassDEP-defined background for natural soil, and in groundwater, are considered COCs (Tables 1, 3 and 4).

Historical TPH data is shown on Table 3. TPH is not considered a COC on the basis that it was superseded by more representative VPH and EPH data.

6.5 Exposure Point Concentrations

As stated above in Section 6.2, the Disposal Site is limited to soil and groundwater, and surface water bodies, wetlands, and indoor air have not been identified as current or potential future exposure points. As such, EPCs were not determined for these media. EPCs were determined for soil and groundwater, as discussed in the following sections.

6.5.1 Soil

Locations of soil samples obtained during investigations for RTN 3-3072 and linked RTNs are listed in Tables 3 through 4 and are depicted on the Site Plan (Figure 3) and Site Plan Detail (Figure 4).

As shown in Tables 3 and 4, and on the Site Plan Detail (Figure 4), soil samples SB-1 through SB-6 were obtained from borings advanced in a very small area relative to the extent of the Disposal Site. As such it is appropriate to consider these borings as a single exposure point, and the concentrations detected in the borings were averaged to characterize a single exposure point.

As also shown in Tables 3 and 4, the maximum concentrations of COCs in soil that are above MassDEP-defined Background for Natural Soil and at or below S-1/GW-1 standards, were used in the Method 1 Risk Characterization as EPCs for soil.

Since the maximum concentrations of C5-C8 aliphatics, C9-C10 aromatics, MTBE, xylenes, naphthalene, and 2-methylnaphthalene in soil exceeded S-1/GW-1 standards, their average concentrations were used as soil EPCs in the risk characterization. For these compounds, it was also determined that at 92 to 98% of the samples met applicable S-1/GW-1 standards, and no concentrations exceeded ten times applicable standards.

Also as shown in Tables 3 and 4, historical soil samples that were superseded by later data were not considered in the development of EPCs.

6.5.2 Soil Hot Spots

Hot Spots consist of relatively small areas with high contaminant concentrations. A Hot Spot does not exist if the maximum concentrations of COCs meet applicable S-1 soil standards. For COCs with EPCs representing their maximum concentrations that meet applicable S-1 soil standards, no Hot Spots were identified for these COCs.

A Hot Spot also includes any discrete area where the COC concentration is greater than 100 times the average concentration in the surrounding area where the exposure potentials are similar (such as at the Disposal Site). For C5-C8 aliphatics, C9-C10 aromatics, MTBE, xylenes, naphthalene, and 2-methylnaphthalene, no Hot Spots were identified.

6.5.3 Groundwater

Locations of groundwater samples obtained during investigations for RTN 3-3072 and linked RTNs are listed in Table 1 and are depicted on the Site Plan (Figure 3).

As shown in Table 2, the average concentrations of COC during the four sampling events between July 2022 and March 2023 in any monitoring well (considered representative of current groundwater conditions) were considered EPCs at the well. For compounds detected previously but not in 2022, one-half of the laboratory detection limit was used as EPCs. The maximum EPC was then used in the Method 1 Risk Characterization as the Site-wide EPC for groundwater.

6.6 Conceptual Site Model (CSM)

Based on the investigations conducted to date, the CSM for the Site is presented as Appendix C. The CSM includes information on sources, contaminant pathways, and potential human and environmental receptors.

7. EXPOSURE ASSESSMENT

The following Exposure Assessment considers the determination of current and foreseeable Disposal Site land uses and categorization of Disposal Site soil and groundwater.

7.1 Current and Foreseeable Disposal Site Activities and Use

A risk characterization is based in part upon the current and reasonably foreseeable Disposal Site activity and use to identify applicable soil and groundwater categories and to estimate the nature and magnitude of exposure.

Based on subsurface investigations and excavations completed between 1989 and 2023, the horizontal extent of the Disposal Site is limited to the area depicted on the Site Plan (Figure 3). Vertically, the Disposal Site extends from 5 to 15 ft bgs. Surface water bodies, wetlands, and indoor air have not been identified as current or potential future exposure points. Current receptors include adult on-site workers, utility workers, adult visitors, and adult and child trespassers. No restrictions are currently in place or proposed to limit Disposal Site property use to current receptors. As such, foreseeable receptors include construction workers, adult and child residents, and park visitors.

7.2 Soil Categorization

The MCP classifies soil based on the level of accessibility, the type of receptors present (adults and children), and the frequency and intensity of receptor contact with soil. Soil categorized as S-1 includes soil closer to the surface in unpaved areas with which receptors will tend to have

higher intensity and greater frequency of contact. Category S-2 soil includes soil contacted with less frequency and with less intensity and include soil under pavement or at greater depth, making frequent and high intensity contact less likely (MassDEP, 1995). Category S-3 soil includes soil with the least likelihood of frequent or high intensity contact, particularly by children, and include all soil more than 15 ft bgs. The soil categorization matrix is outlined in the MCP at 310 CMR 40.0933(9).

Based on current and potential Disposal Site activities and use, soil categories of S-1, S-2 and S-3 are applicable to the Disposal Site.

7.3 Groundwater Categorization

In accordance with 310 CMR 40.0932, groundwater is categorized based on its current and/or foreseeable future use as drinking water (GW-1), its potential to act as a source of volatile material to indoor air (GW-2), and its potential to discharge material to surface water (GW-3).

The Disposal Site is located within a Current Drinking Water Source Area (Zone A of a Class A Water Body; see the Phase 1 Site Assessment Map in Appendix A). As such, the GW-1 groundwater classification applies to the Disposal Site.

The depth to groundwater at the Disposal Site was less than 15 feet during groundwater monitoring events completed at the Site. Since the depth to groundwater is less than 15 feet, groundwater at the Disposal Site is categorized as GW-2 within 30 feet of occupied buildings.

All groundwater within Massachusetts, including Disposal Site groundwater, is considered to have the potential to discharge to surface water and is categorized as GW-3.

7.4 Hazard Identification

Hazard identification describes the nature of a substance that causes it to be of regulatory concern and identifies the effects of substances determined to cause adverse effects in humans. The U.S. EPA has characterized substances commonly encountered at hazardous waste sites as to whether they are likely to have carcinogenic and/or non-carcinogenic effects in humans. Compounds detected in Disposal Site media, the selection of COCs, and identification of EPCs are discussed above in Section 6.

8. METHOD 1 RISK CHARACTERIZATION

In accordance with 310 CMR 40.0900, characterization of the risks posed by the release is required at disposal sites to provide the quantitative and qualitative information to evaluate the need for further remedial actions or to document that a level of No Significant Risk of harm to health, safety, public welfare, and the environment has been achieved for current and future use of the Site.

Various information related to Site characteristics as well as the nature and extent of Site OHM was presented in previous sections of this Phase V Completion and PSNC Statement. This

information is used together with the information presented in this section to characterize risk to human health and the environment.

This risk characterization was prepared in general accordance with the MCP (310 CMR 40.0900 through 40.0960), and risk characterization guidance documents developed by MassDEP and the U.S. EPA.

8.1 Characterization of Risk to Human Health

A Method 1 human health risk characterization was performed in a manner generally consistent with risk assessment guidance from MassDEP and the U.S. EPA. Human health risk characterization integrates five separate components: hazard identification, dose-response assessment, exposure assessment, risk characterization, and uncertainty analysis. Under the MCP, a Method 1 risk characterization consists of a comparison of calculated EPCs for contaminated Disposal Site media to applicable MCP Method 1 standards.

As shown in Tables 1, 3 and 4, no EPC exceeds an applicable Method 1 soil standard. For EPCs based on the average concentration of COCs, at least 75% of the samples met the applicable soil standard, and no COCs were present at any location at more than 10 times the applicable soil standard.

8.1.1 Applicable or Suitably Analogous Public Health Standards

No Applicable or Suitably Analogous Public Health Standards are available for comparison with Site soil.

Since groundwater at the Disposal Site is not classified as GW-1, no applicable or suitably analogous drinking water standards or guidelines are applicable to the Disposal Site.

EPCs of COCs in groundwater at the Disposal Site meets GW-3 standards. As such, although surface water has not been identified as a current or potential Exposure Point, any impact to surface water from the Disposal Site would be below the lowest ecologically based criteria considered by MassDEP in the development of the GW-3 standards.

In summary, EPCs of COCs in soil and groundwater at the Site do not exceed Applicable or Suitably Analogous Public Health Standards.

8.1.2 Upper Concentration Limits

As shown on Tables 1, 3 and 4, EPCs of groundwater and soil meet applicable Method 1 standards. All UCLs promulgated by MassDEP are greater than Method 1 standards. As such, no EPC exceeds a UCL.

8.1.3 Uncertainty Analysis

Atlas performed this Method 1 risk characterization in accordance with the MCP at 310 CMR 40.0900 - 40.0960 and risk assessment guidance provided by MassDEP and U.S. EPA. Use of MCP Method 1 standards as comparison criteria incorporates conservative MassDEP and U.S.

EPA exposure parameters and toxicity values. This, along with realistic but conservative assumptions that go into the calculation of EPCs, ensures that this risk characterization provides a conservative estimate of Site-related human health risk.

This risk characterization is subject to a number of uncertainties. As a result, risk estimates derived from the equations and assumptions should not be interpreted as absolute estimates of the potential risk of harm to health at the Site. The estimates are the results of conservative, consistent analysis intended to evaluate the potential for adverse impact but are not predictors of such impact.

In all cases, state-certified laboratories determined COC concentrations using applicable QA/QC guidance and appropriate analytical protocols. Although such measures do not guarantee good quality data, Atlas has no reason to suspect that Site analytical data do not meet applicable QA/QC guidance or are not appropriate for use in the characterization of health risks at this Site.

8.1.4 Human Health Risk Conclusions

This Method 1 Risk Characterization demonstrates that under current soil and groundwater conditions, a condition of No Significant Risk of harm to human health exists for current and/or potential future receptor groups potentially exposed to COCs at the Site, with no assumptions or conditions limiting potential exposure.

8.2 Characterization of Risk to the Environment

To characterize risk to the environment, the MCP stipulates that the risk of harm to biota and habitats shall be characterized by evaluating ecological parameters using a two-stage approach. The objective of Stage I is to identify and document whether conditions warrant a Stage II risk characterization, either because significant exposure pathways exist or because environmental harm is readily apparent. If required, additional assessment takes the form of a Stage II risk characterization, which focuses on an assessment of the potential ecological effects of Site contaminants.

8.2.1 Environmental Receptor/Habitat Evaluation

According to 310 CMR 40.0956(2): “[t]he focus of an Ecological Risk Evaluation shall be on any environmental resource areas, such as wetlands, aquatic and terrestrial habitats, and fisheries that exist at a site. A condition of No Significant Risk to the Environment would exist if steps have been taken to eliminate or mitigate the following conditions, where applicable, affecting an environmental resource at a site:

a) Evidence of stressed biota attributable to the release at the Site, including, without limitation, fish and wildlife kills or abiotic conditions;

b) The visible presence of oil, tar, or other separate phase hazardous material in soil within three feet of the ground surface over an area equal to or greater than two acres, or over

an area equal to or greater than 1,000 square feet in sediment within one foot of the sediment surface;

c) Continuing discharge of contaminated groundwater to surface water where the levels of the oil or hazardous material attributable to the release already exceed Massachusetts Surface Water standards;

d) Continuing discharge of contaminated groundwater to surface water where surface water and/or sediment concentrations of oil and/or hazardous materials attributable to the release already pose a significant risk;

e) Migration of oil or hazardous material to additional environmental media or resource area where resultant exposures would have the potential to pose a significant risk of harm in the future; and,

f) Ecological risk or harm such that recovery would be substantially more difficult or would require more time if conditions were to remain unremediated for even a short period of time."

None of the conditions listed above are known to exist at the Disposal Site. Therefore, a condition of No Significant Risk relative to the environment exists at the Disposal Site for current Disposal Site conditions.

8.3 Characterization of Risk to Safety

No uncontrolled release of OHM was detected or observed at the Disposal Site. No unsecured pits, ponds, lagoons, or other dangerous structures, or any uncontained materials were identified at the Disposal Site for the storage of reactive chemicals. There are no open or ongoing excavations at the Disposal Site and Remediation Waste generated during Response Actions was disposed of off-site appropriately. On the basis of the foregoing, a condition of No Significant Risk of harm to safety exists at the Disposal Site.

8.4 Characterization of Risk to Public Welfare

No nuisance odors resulting from the release are evident at the Disposal Site and none are anticipated. The concentrations of COCs at the Disposal Site are not likely to produce nuisance odors during foreseeable Disposal Site activities and use. Use of the Disposal Site for livestock is not anticipated. The Disposal Site has not degraded the resources of the community. The Disposal Site has not produced the loss of active or passive use of the property and no nonpecuniary effects are expected. The areas of impact are not expected to negatively impact the usefulness of the property. No EPC exceeds an Upper Concentration Limit. Therefore, a condition of No Significant Risk of harm to public welfare exists at the Disposal Site.

9. LIGHT NONAQUEOUS PHASE LIQUID MOBILITY

9.1 Introduction

Due to the presence of LNAPL during historic site investigations (i.e., September to November 2001 [IRA Completion Report, GES, November 14, 2001; RTN 3-21062]), the following LNAPL evaluation was prepared in consideration of the MassDEP Policy #WSC-14-450, Light Nonaqueous Phase Liquids (LNAPL) and the MCP: Guidance for Site Assessment and Closure, issued as a final policy on February 19, 2016. The LNAPL mobility policy presents a simplified approach consisting of a series of investigatory and/or remedial steps with specified levels of efforts, data requirements, and evaluation metrics. MassDEP considers utilization of this approach as satisfying MCP performance standards to assess and address LNAPL mobility and recoverability.

9.2 Disposal Site History

Disposal Site history, which includes summaries of the historical presence of LNAPL, is summarized in the CSM (Appendix C).

9.3 Gauging Data

Gauging data utilized to support this LNAPL evaluation are summarized in Table 1. As shown on the table, semi-annual and quarterly gauging events were conducted subsequent to the last detection of LNAPL (November 2001) between January 2002 and December 2018. Wells gauged included MW-2, as well as OW-1, MW-2R, MW-2D, MW-5D, and MW-5DD, which are and were proximate to the location of MW-2. Based on the gauging events, more than one year of quarterly monitoring was evaluated to ensure high and low water table conditions were encountered at each location.

With the exception of seven gauging events between June 2006 and June 2013, rainfall as measured at the Boston Logan weather station (approximately 20 miles southeast of the Disposal Site), was less than two inches during the seven days preceding each gauging event. Records of Climatological Observations for the weather station between January 2002 and June 2018, obtained from the National Oceanic and Atmospheric Administration National Environmental Satellite, Data and Information Service, are provided in Appendix G.

As shown in the Table 1, no LNAPL has been detected since November 2001.

9.4 Monitoring Well Network

The LNAPL mobility policy states that the spacing of a monitoring well network must be in the range of 15 to 30 feet within the core and at the perimeter of the LNAPL plume. As depicted on the Site Plan, four former and current monitoring wells (OW-1,MW-2D, MW-5D, and MW-5DD) were and are located within approximately 30 feet of MW-2, where LNAPL was observed between September and November 2001, and replacement well MW-2R. The monitoring well network is adequate to assess potential impacts to surface waters and buildings, sumps, and utilities/subsurface structures within the groundwater fluctuation/LNAPL smear zone.

9.5 Soil Borings

Soil borings SB-1 through SB-6 were advanced in April 2023. The locations of the soil borings are depicted on the Site Plan Detail (Figure 3). Soil samples were obtained from the borings for laboratory VPH analysis. Soil data are summarized in Table 2.

9.6 Geotechnical Data

As stated in Section 4.1.1, soil encountered during drilling consisted of tan to dark brown coarse to fine sand with gravel to approximately 20 ft bgs. Based on the vertical extent of the Disposal Site (5 to 15 ft bgs), soil is considered to be fine to medium sand for this LNAPL evaluation.

9.7 VPH Data

VPH data obtained from the advancement of soil borings SB-1 through SB-6 are summarized in Table 1.

The maximum total detected gasoline-related petroleum hydrocarbons, including the VPH fractions and target analytes, was 6,620 mg/kg in the soil boring for monitoring well SB-2 (11 ft bgs). For gasoline, according to the Soil Saturation Limit table presented in the LNAPL mobility policy, the theoretical soil saturation limit for fine to medium sand is 215 mg/kg, while the measured residual LNAPL concentration value, which can vary by an order of magnitude, is 5,833 mg/kg. Based on these soil data alone, the LNAPL mobility policy suggests that potentially mobile/potentially recoverable LNAPL may be present at the Disposal Site. However, as discussed in the following sections, this evaluation has determined that LNAPL with Micro-Scale Mobility is present at the Disposal Site, and based on the measured thickness, its removal is considered categorically infeasible.

9.8 Presence of LNAPL with Micro-Scale Mobility

Since identification of the release in November 1986, LNAPL attributable to the Disposal Site has not been visibly present in a subsurface utility, building sump, or other subsurface structure at or immediately downgradient of the Disposal Site, or at a surface water body immediately downgradient of the Disposal Site. Measurable thicknesses of LNAPL were limited to observations at monitoring well MW-2 between September and November 2001. However, based on the petroleum hydrocarbon concentrations at soil borings SB-1, SB-2, and SB-4 (see Table 2), it is presumed that LNAPL with Micro-Scale Mobility is present at the Disposal Site.

9.9 Stability of LNAPL

Subsurface investigations completed at the Disposal Site demonstrate that the plume of LNAPL (observations of LNAPL at monitoring well MW-2 between September and November 2001) has not expanded since at least 2001, and has not persisted beyond November 2001. In addition, LNAPL is not discharging or periodically discharging to surface water, a building or building drainage sumps, or a utility structure, including manholes, vaults, and piping/conduits. LNAPL was also not observed to be present within a preferred flow path, including pervious backfill of utility conduits. Based on the foregoing, no evidence exists that LNAPL at the Disposal Site is

moving as a separate phase through subsurface porous media (i.e., the LNAPL footprint is not expanding).

The LNAPL mobility policy established stability action levels of various LNAPL thicknesses within various soil types. Based on the geotechnical data presented above, soil at and near MW-2 is considered fine to medium sand, which yields an LNAPL thickness of 4 to 8 inches (0.33 to 0.66 feet) as the stability action level for this evaluation. The stability action level has not been exceeded since 2001.

Semi-annual and quarterly monitoring conducted since January 2002 has demonstrated that subsurface LNAPL was not observed to be migrating along or within a preferred flow path; subsurface LNAPL did not discharge into a building, utility, drinking water well, or surface water body; and observed LNAPL thickness levels did not consistently or significantly increase in downgradient monitoring wells.

The stability action level of 0.33 to 0.66 feet has not been exceeded at the Disposal Site since November 2001 or earlier. In addition, each monitoring well at the Disposal Site was installed to straddle the groundwater fluctuation zone.

Based on the forgoing, there is no current indication of Non-Stable LNAPL at the Disposal Site.

9.10 Feasibility of Removing LNAPL

As documented above, Non-Stable LNAPL is not present at the Disposal Site, and LNAPL with Micro-Scale Mobility is presumed to be present. The LNAPL mobility policy states that LNAPL with Micro-Scale Mobility must be removed if and to the extent feasible to achieve a Permanent Solution. However, for sites where LNAPL thickness in any excavation, boring, or monitoring well was at one time equal to or greater than one-eighth inch, it may be considered categorically infeasible to initiate removal operations in cases where a monitoring program conducted on at least a quarterly basis has demonstrated that all excavations, borings, and monitoring wells had less than one-eighth inch thickness of LNAPL for a preceding period of at least 12 months. No measurable thickness of LNAPL has been observed at the Disposal Site in semi-annual and quarterly gauging events conducted since January 2002. Therefore, LNAPL removal at the Disposal Site is considered categorically infeasible.

9.11 Achieving a Permanent Solution

The LNAPL mobility policy states that a Permanent Solution may be supported for an LNAPL disposal site if Non-Stable LNAPL was never or is no longer present; LNAPL with Micro-Scale Mobility has been removed if and to the extent feasible; and all other MCP requirements and standards have been met, including those related to source elimination or control, migration control, disposal site characterization and risk assessment.

In accordance with the provisions of the MCP as set forth at 40.1012(2)(d), an AUL is required for disposal sites where a Permanent Solution has been achieved and LNAPL with Micro-Scale Mobility is present. However, implementation of an AUL addressing LNAPL is not required if the

thickness of visible LNAPL in any excavation, boring or monitoring well remaining at a disposal site during any foreseeable period of time as described at 310 CMR 40.1005 is less than one half inch. Based on the absence of measurable LNAPL, the thickness of LNAPL is not expected to increase to one-half inch, and the implementation of an AUL addressing LNAPL is therefore not required to support the PS.

10. REPRESENTATIVENESS AND DATA USABILITY ASSESSMENT

This section of the Phase V Completion, RAM Completion, and PSNC Statement was developed in accordance with MassDEP's guidance document WSC-07-350 (MCP Representativeness Evaluations and Data Usability Assessments).

10.1 Data Representativeness Evaluation

Pursuant to the requirements established within Section 40.1056(2)(k) of the MCP, a data representativeness evaluation was conducted for all data collected for the Site. The data serve as the basis for the opinions rendered for RTN 3-3072 and linked RTNs.

10.1.1 Conceptual Site Model

A CSM is presented in Appendix C.

10.1.2 Use of Field Screening Data

As documented in prior submittals to MassDEP for RTN 3-3072 and linked RTNs, soil samples obtained during subsurface investigations and UST system investigations were screened with a PID equipped with a 10.6 electron-volt lamp and calibrated with an isobutylene standard gas to read as benzene. The calibrated PID was employed using the MassDEP Jar Headspace Analytical Screening Procedure to generate screening values for each soil sample. The PID headspace readings were utilized in the selection of soil samples for laboratory analysis.

10.1.3 Number, Spatial Distribution, and Handling of Samples

Soil samples were collected from the locations at or near potential source areas (i.e., former fuel and waste oil USTs, existing gasoline USTs and associated dispensing system, existing fuel oil USTs, former and existing oil/water separator and former MDC trap associated with former service bay floor drains, and former surface water catch basin). Soil and groundwater sampling locations were expanded based on previously obtained analytical and field screening data during subsurface investigations and/or other assessment activities.

Based on subsurface investigations and excavations completed between 1989 and 2023, the horizontal extent of the Disposal Site is limited to the area depicted on the Site Plan (Figure 3). Vertically, the Disposal Site extends from 5 to 15 ft bgs.

Over 60 soil samples were obtained from the Disposal Site between 1989 and 2023. In addition, over 1,200 groundwater samples were obtained between 1989 and 2023. Laboratory data associated with samples collected in 2022 and 2023 is considered representative of current Disposal Site conditions.

The data obtained during investigations for RTN 3-3072 and linked RTNs is sufficient in quantity and quality to establish the nature and extent of the contamination and conservatively determine appropriate EPCs of COCs in contaminated media. With respect to field quality assurance and quality control, all samples were collected using standard operating procedures and managed under chain of custody and in accordance with U.S. EPA and/or MassDEP protocols established at the time of sampling. Samples were collected using pre-cleaned containers with the preservatives as supplied by the laboratory and were placed on ice following collection.

10.1.4 Temporal Distribution of Samples

Soil and groundwater samples were collected between 1989 and 2023, as summarized in Tables 1, 3 and 4. No new releases to the subsurface have been documented since 1996. Soil concentrations at the Disposal Site are not expected to increase in the absence of additional releases; therefore, soil EPCs are appropriate as calculated in Tables 3 and 4. The groundwater EPCs (Table 2) are based on data obtained during monitoring events conducted in 2022 and 2023, which are considered representative of current conditions. Based on the low detections of COCs relative to applicable standards, the temporal distribution of groundwater samples is considered adequate to generate conservative EPCs to support the risk characterization.

10.1.5 Completeness

The data set presented in this Phase V Completion and PSNC Statement is considered complete and adequate to support the risk characterization. Based on subsurface investigations and excavations completed between 1989 and 2022, the Disposal Site is limited to the area depicted on the Site Plan (Figure 3), at approximately 5 to 15 ft bgs. Soil and groundwater data are sufficient to characterize Disposal Site conditions related to RTN 3-3072 and linked RTNs.

10.1.6 Consistency and Uncertainty

The data collected were consistent with the CSM developed by Atlas. No inconsistencies or sources of uncertainty were identified during the Site assessment and/or Response Actions that would undermine the conclusions of the PSNC opinion.

10.1.7 Unrepresentative Data

Atlas considers all soil data collected at the Site to be consistent and representative of Site conditions.

10.2 Data Usability Assessment

The MCP, as set forth at 310 CMR 40.0017 and 40.0191(2)(c), requires that analytical and environmental monitoring data be scientifically valid and defensible, and of a level of precision and accuracy to commensurate with its stated or intended use, taking into consideration relevant policies and guidelines issued by MassDEP and the U.S. Environmental Protection Agency, including the MassDEP CAM. 310 CMR 40.0017(3)(i) further provides that all submittals document any known conditions or findings which may affect the validity of analytical data, including unsatisfactory data obtained for blank, duplicate, surrogate, or spiked samples.

As documented herein, the analysis of soil and groundwater samples collected between 2003 and 2023 were completed using analytical methods defined in the CAM.

Exceptions regarding soil and groundwater data were noted in laboratory reports included in documents submitted to MassDEP through February 2023. None of the exceptions noted were considered sufficiently significant to render the data unusable.

Laboratory reports of analysis of soil and groundwater samples obtained in 2023 are included in Appendix E. Exceptions to QC objectives reported by the laboratory include the following:

- The initial analysis of the groundwater sample obtained from monitoring well MW-1 for analysis of nitrate was within the holding time. Reanalysis for the required dilution was past the holding time.

The exception noted was considered insufficiently significant to render the data unusable.

Based on the foregoing, a review of field practices, and a review of laboratory reports, it is the opinion of the Licensed Site Professional named herein that the analytical data obtained from samples collected during investigations associated with RTN 3-3072, including linked RTNs, and considered in the risk characterization meet CAM requirements. Therefore, the data utilized are scientifically valid and defensible, and of a sufficient level of precision, accuracy, and completeness to support this Phase V Completion and PSNC Statement.

11. PHASE V COMPLETION AND PERMANENT SOLUTION WITH NO CONDITIONS STATEMENT

In accordance with 310 CMR 40.0894 and 40.1056, this report documents that the requirements of a Phase V Completion and PSNC have been met. This section presents a summary of the supporting documentation.

11.1 General Disposal Site Information

The Site information requirements for a PSNC Statement are provided in this section. The information presented below in bold, italic text corresponds to the requirements specified in 310 CMR 40.1056 of the MCP.

a) Disposal Site Name and DEP Release Tracking Number:

Site Name: Mobil Station #1436

Site Address: 309 Lowell Street
Andover, Massachusetts

Active Release Tracking Number: 3-3072

b) Category of Solution:

A PSNC has been achieved based on the following facts:

- A level of No Significant Risk, as specified in 310 CMR 40.0900, exists or has been achieved. A Method 1 Risk Characterization demonstrates that a Condition of No Significant Risk exists now and for the foreseeable future at the Disposal Site, with no restrictions.

- Based on investigations completed for RTNs 3-3072, 3-13955 and 3-21062, two source areas for COCs on the Site were identified, including the vicinity of and downgradient from the UST area, characterized petroleum hydrocarbons in vadose and saturated soils, and the vicinity of and downgradient from a 1996 release from a UST line flex connector. The Phase II CSA (GES, October 2003) stated that other potential sources of OHM include the existing gasoline USTs and associated dispensing system, the former used oil UST, existing fuel oil UST, former and existing oil/water separator and former MDC trap associated with former service bay floor drains, and former surface water catch basin. All sources of OHM contamination have been eliminated or controlled, as specified in 310 CMR 40.1003(5)(a) and (b). No source of petroleum hydrocarbons subsequent to 1996 has been identified. OHM has been controlled and based on soil and groundwater data and the attainment No Significant Risk as demonstrated through a Method 1 Risk Characterization, significant migration of petroleum hydrocarbons from the Site is not likely.

- No Disposal Site-related volatile OHM is present such that it would result in significant contamination of ambient or indoor air.

- NAPL is not present.

- No threats of releases are present.

- The level of OHM concentrations in the environment have been reduced to as close to Background as feasible, as specified at 310 CMR 40.1020. Further discussion of the feasibility of remediating to Background is provided in Section 9.2(g).

c) Risk Characterization Method:

A characterization of risk to human health and the environmental was conducted as a Method 1 Risk Characterization. See Section 7 for more information.

d) Other Permanent or Temporary Solution Statements or further Remedial Response Actions related to a portion of or the entire disposal site:

RTNs associated with the Disposal Site include RTN 3-3072 and linked RTNs 3-13955 and 3-21062. No other RTNs apply to a portion or entirety of the Disposal Site. As such, no other permanent or temporary solution Statements have been submitted to MassDEP, and further Remedial Response Actions related to a portion of or the entire disposal site have been undertaken.

e) Indication as to whether Permanent Solution is based upon implementation of an Activity and Use Limitation (AUL) at the disposal site:

No AUL is required or has been implemented for RTN 3-3072 or linked RTNs.

f) Indication as to whether Permanent Solution is based upon assumptions about Site activities, uses or conditions that do not require an AUL per 310 CMR 40.1013:

This Phase V Completion and PSNC does not rely on any conditions or assumptions limiting Site activities or uses.

g) Indication as to whether Permanent Solution is based upon operation of Active Exposure Pathway Mitigation Measures per 310 CMR 40.1025:

No Active Exposure Pathway Mitigation Measures are needed or required for this Phase V Completion, RAM Completion and PSNC.

h) LSP Opinion as to whether requirements of applicable category of Permanent Solution have been met:

The LSP Opinion is provided in Section 11, and in the BWSC104 transmittal form submitted concurrently with this Phase V Completion and PSNC via eDEP.

i) Certification of the Permanent Solution Statement and all documents submitted with Permanent Solution Statement:

The Permanent and Temporary Solution Statement transmittal form (BWSC104) and Phase V Completion transmittal form (BWSC108), and associated LSP Opinions are submitted concurrently with this Phase V Completion and PSNC via eDEP. This transmittal forms includes the certifications of the PRP and LSP listed in Section 2 of this Phase V Completion, RAM Completion and PSNC.

j) Indications as to whether OHM in soil and groundwater exceed one or more Upper Concentration Limits:

All EPCs meet applicable Method 1 standards. As such, no EPC of any COC in soil or groundwater exceeded the MCP UCLs identified in 310 CMR 40.0996.

k) Indication as to whether the analytical data used to support the Permanent Solution was generated pursuant to the Department's Compendium of Analytical Methods:

See Section 8 of this Phase V Completion and PSNC Statement.

11.2 Supporting Documentation for Permanent Solution with No Conditions

The Site supporting documentation requirements for a PSNC Statement are provided in this section. The information presented below in bold, italic text corresponds to the requirements specified in 310 CMR 40.1056(2) of the MCP.

a) Clear and accurate description of the location of the site for which the Permanent Solution Statement applies:

The Site is located at 309 Lowell Street, on the northwestern side of Lowell Street (between Interstate Highway 93 and Greenwood Road), in a mixed residential, commercial and undeveloped area of Andover, Massachusetts.

The Site is a currently operating gasoline station and Dunkin' restaurant. Based on investigations completed for RTNs 3-3072, 3-13955 and 3-21062, the horizontal extent of the Disposal Site is as depicted on the Site Plan (Figure 3).

b) A succinct summary of the Conceptual Site Model:

The CSM is provided in Appendix C.

c) Demonstration that all Sources of OHM Contamination have been eliminated or controlled, as specified in 310 CMR 40.1003(5):

Sources of OHM contamination have been controlled at the Disposal Site, as specified in 310 CMR 40.1003(5). Further discussion of the source of OHM at the Disposal Site is included in Section 6.1 of this Phase V Completion and PSNC Statement.

d) Demonstration that response actions have been taken to adequately assess and control subsurface migration of OHM, as specified in 310 CMR 40.1003(6)(a):

Through the performance of a Method 1 Risk Characterization, Atlas has demonstrated that concentrations of COC in soil and groundwater pose No Significant Risk to human health or the environment. Therefore, significant subsurface migration of residual contamination in soil or groundwater is not likely.

e) Demonstration that response actions have been taken to adequately assess and control NAPL mobility, as specified in 310 CMR 40.1003(7)(a):

No NAPL is present at the Disposal Site.

f) Information supporting the conclusion that a level of No Significant Risk has been achieved or exists:

Atlas presents a Method 1 Risk Characterization in Section 7 that a level of No Significant Risk exists at the Disposal Site.

g) Information documenting the extent to which levels of OHM in the environment have been reduced to Background, and/or the results of the feasibility evaluation demonstrating that the achievement of Background is not feasible:

The MCP defines Background as "those levels of oil and hazardous material that would exist in the absence of the disposal site of concern, including both Natural Background and Anthropogenic Background." Natural and Anthropogenic Background are further defined:

> Natural Background means those levels of oil and hazardous material that would exist in the absence of the disposal site of concern, are ubiquitous and consistently present in

the environment at and in the vicinity of the disposal site of concern and are attributable to geologic or ecological conditions.

Anthropogenic Background means those levels of oil and hazardous material that would exist in the absence of the disposal site of concern, and which are:

- attributable to atmospheric deposition of industrial process or engine emissions and are ubiquitous and consistently present in the environment at and in the vicinity of the disposal site of concern;
- attributable to Historic Fill;
- associated with sources specifically exempt from the definitions of disposal site or release as those terms are defined in MGL c. 21E and 310 CMR 40.0006;
- releases to groundwater from a public water supply system; or,
- petroleum residues that are incidental to the normal operation of motor vehicles.

The MCP (310 CMR 40.1020) specifies that "the feasibility of reducing the concentrations of OHM in the environment…to levels that achieve or approach Background levels shall be evaluated..." and "at any disposal site…where one or more remedial actions are undertaken to achieve a Permanent Solution, those remedial actions shall include…one or more measures designed to reduce…concentrations of OHM to levels that would exist in the absence of the disposal site of concern. Such measures shall, to the extent feasible, achieve or approach Background levels of OHM…"

Atlas has conducted the following feasibility evaluation for achieving or approaching Background in accordance with 310 CMR 40.1020 (which references 310 CMR 40.0860) and the MassDEP final policy document Conducting Feasibility Evaluations Under the MCP, Policy #WSC-04-160, dated July 16, 2004. Per the MCP, 310 CMR 40.0860(7), "…the benefits of implementing Comprehensive Remedial Alternatives to achieve a Permanent Solution…shall justify the related costs unless: (a) the incremental cost of conducting the Comprehensive Remedial Alternatives…is substantial and disproportionate to the incremental benefit of risk reduction, environmental restoration, and monetary and non-pecuniary values."

Compounds at Background in Soil

COCs in soil include petroleum hydrocarbons resolved by the MassDEP VPH and EPH analytical methods, PCBs and arsenic and does not include petroleum hydrocarbons or metals for which maximum detections are less than Background concentrations defined by MassDEP for Natural Soil (see Tables 1 and 2).

Since Background concentrations have not been established for PCBs, VPH and EPH fractions, and VPH target analytes, these COCs are considered present above Background.

Feasibility of Achieving or Approaching Background in Soil

MassDEP Policy #WSC-04-160 states that “background in soil for persistent contaminants located in areas classified as S-1 shall be considered approached if: the concentration of each persistent contaminant at each sampling location is at or below the Method 1 S-1 standards as specified in 310 CMR 30.0900.”

Since the EPCs of all COCs meet S-1 standards, it is not considered feasible to achieve or approach Background relative to these compounds.

Compounds at Background in Groundwater

Since Background concentrations have not been established for groundwater, all COCs are considered present above Background.

Feasibility of Achieving or Approaching Background in Groundwater

MTBE was last detected in groundwater in 2006. In accordance with MassDEP Policy #WSC-04-160, the maximum concentration of MTBE at each Exposure Point is at or below one-half the applicable Method 1 groundwater standards as specified in 310 CMR 40.0900, based on groundwater data; therefore, Background is considered approached relative to MTBE.

Since remaining COCs are non-persistent, it is not considered feasible to achieve or approach Background relative to these compounds.

h) A copy of any and all AULs which have been implemented under 310 CMR 40.1070:

No AULs have been implemented for the Disposal Site.

i) For Permanent Solutions with Conditions where OHM concentrations in soil exceed UCLs deeper than 15 feet below ground surface or beneath an engineered barrier, demonstration that achievement of UCLs is not feasible:

Not Applicable. No EPCs exceed MCP UCLs.

j) For Permanent Solutions with Conditions based upon assumptions about site activities, uses, or conditions that do not require an AUL, documentation related to such assumptions and conditions:

This Phase V Completion and PSNC does not rely on any assumptions concerning site activities, uses, or conditions.

k) A Data Usability Assessment documenting that the data relied upon is scientifically valid and defensible, and a Data Representativeness Evaluation, documenting the adequacy of the data sets used to support this Permanent Solution:

See Section 8.

l) Description of any operations, maintenance and/or monitoring required to maintain conditions at the disposal site upon which the Permanent Solution is based:

None.

11.3 MCP Compliance Fee

No MCP compliance fees are required for submittal of this Phase V Completion, RAM Completion and PSNC.

12. SUMMARY AND CONCLUSIONS

Based on the information presented in this Phase V Completion, RAM Completion and PSNC, Atlas provides the following Site summary and conclusions:

- A level of No Significant Risk, as specified in 310 CMR 40.0900, exists or has been achieved. A Method 1 Risk Characterization demonstrates that a Condition of No Significant Risk to human health, safety, public welfare, and the environment exists now and for the foreseeable future at the Disposal Site, with no conditions limiting exposure.
- Based on investigations completed for RTNs 3-3072, 3-13955 and 3-21062, two source areas for COCs on the Site were identified, including: the vicinity of and downgradient from the UST area, characterized as petroleum hydrocarbons in vadose and saturated soils; and the vicinity of and downgradient from a 1996 release from a UST line flex connector. The Phase II CSA (GES, October 2003) stated that other potential sources of OHM include the existing gasoline USTs and associated dispensing system, the former used oil UST, existing fuel oil UST, former and existing oil/water separator and former MDC trap associated with former service bay floor drains, and former surface water catch basin. All sources of OHM contamination have been eliminated or controlled, as specified in 310 CMR 40.1003(5)(a) and (b). No source of petroleum hydrocarbons subsequent to 1996 has been identified. OHM has been controlled and based on soil and groundwater data and the attainment No Significant Risk as demonstrated through a Method 1 Risk Characterization, significant migration of petroleum hydrocarbons from the Site is not likely.
- NAPL is not present.
- No threats of releases are present.
- Concentrations of petroleum hydrocarbons in the environment have been reduced to as close to background levels as feasible, as specified at 310 CMR 40.1020. Further discussion of the feasibility of remediating to background is provided in Section 9.2(g).
- Site conditions are consistent with a PSNC, based on the criteria outlined in the MCP, 310 CMR 40.1040.

13. LSP OPINION

In the LSP's professional opinion and judgment and to the best of the LSP's knowledge, information and belief, the Response Action(s) that is (are) the subject of this submittal (i) is

(are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such Response Action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies with the identified provisions of all orders, permits and approvals identified, except as noted in this submittal.

14. PUBLIC INVOLVEMENT

As specified in 310 CMR 40.1403, the MCP requires that owners of properties within the Disposal Site and the Chief Municipal Officer and Board of Health in the city where the Site is located be notified of the submittal of Permanent Solution Statements. Copies of correspondence indicating that Response Actions have been completed and that this Phase V Completion and PSNC is available for public review, are included in Appendix H.

15. LIMITATIONS

Our professional services have been performed and our findings obtained and prepared in accordance with customary principles and practices in the field of environmental science and engineering and the MCP. This statement is in lieu of other statements either expressed or implied. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Environmental evaluations are limited in the sense that conclusions are developed and information obtained from limited research and secondary sources. Except as set forth in this report, Atlas has not made independent investigations as to the accuracy or completeness of the information derived from the secondary sources and personal interviews and has presumed that such information was accurate and complete. It should be noted that conditions in other portions of the property not sampled by Atlas may differ from those that were sampled. Conclusions, recommendations, and/or opinions in this report are based on information obtained from these installations, laboratory testing results, and applicable state regulations. Any qualitative or quantitative information regarding the Site, which was not available to Atlas at the time of this assessment, may result in a modification of the representations made in this report.

This report is intended for the sole use of Global. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users including Secondary Client and use or re-use of this document or the findings or conclusions is at risk of said user. Any use or reliance on this report shall be limited by the acknowledgment that actual site conditions may change with time, and that hidden conditions may exist at the Property that were not discovered within the authorized scope of the assessment.

Atlas makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of the report and in the assembling of data and information related thereto. No other warranties are made to any third party, either expressed or implied.

TABLES

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-1	07/30/1998	148.35	8.51	ND	139.84	<1.0	<1.0	<1.0	<3	19	NA	NA	NA	NA
(GW-1,2,3)	09/11/1998	148.35	9.41	ND	138.94	<1.0	<1.0	<1.0	<3	29	NA	NA	NA	NA
5-15'	10/26/1998	148.35	8.84	ND	139.51	<1.0	<1.0	<1.0	<3	40	NA	NA	NA	NA
	11/13/1998	148.35	9.02	ND	139.33	<1.0	<1.0	<1.0	<3	35	NA	NA	NA	NA
	12/17/1998	148.35	9.15	ND	139.20	<1.0	<1.0	<1.0	<3	37	NA	NA	NA	NA
	01/06/1999	148.35	8.69	ND	139.66	<1.0	<1.0	<1.0	<3	31	NA	NA	NA	NA
	02/09/1999	148.35	7.80	ND	140.55	<1.0	<1.0	<1.0	<3	8	NA	NA	NA	NA
	03/29/1999	148.35	7.38	ND	140.97	<1.0	<1.0	<1.0	<3	9	NA	NA	NA	NA
	06/24/1999	148.35	8.75	ND	139.60	<1.0	<5	<5	<15	5.5	<5	<100	<100	<100
	11/20/2001	148.35	8.10	ND	140.25	<5.0	<5.0	<5.0	<10	**247**	<5.0	<50	<50	<50
	02/26/2001	148.35	8.30	ND	140.05	<1.0	<5.0	<5.0	<15	50.8	<5	<100	<100	<100
	07/16/2001	148.35	8.73	ND	139.62	<5.0	<5.0	<5.0	<10	55.8	<5	<50	<50	<50
	01/22/2002	148.35	9.13	ND	139.22	<5.0	<5.0	<5.0	<10	30.4	<5.0	<50	<50	<50
	05/17/2002	148.35	8.10	ND	140.25	<5.0	<5.0	<5.0	<10	20.4	<5.0	<50	<50	<50
	10/02/2002	147.98	9.92	ND	138.06	<2.0	<2.0	<2.0	<4.0	6	<3.0	<50	<50	<50
	11/13/2003	147.98	8.81	ND	139.17	<2.0	<2.0	<2.0	<4.0	5.1	<3.0	<50	<50	<50
OW-3	07/30/1998	149.86	9.21	ND	140.65	<1.0	<1.0	<1.0	<3	5	NA	NA	NA	NA
(GW-1,3)	09/11/1998	149.86	9.92	ND	139.94	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
5-15'	10/26/1998	149.86	9.68	ND	140.18	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	149.86	9.91	ND	139.95	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	149.86	9.71	ND	140.15	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	149.86	9.60	ND	140.26	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	149.86	8.15	ND	141.71	<1.0	<1.0	<1.0	<3	11	NA	NA	NA	NA
	03/29/1999	149.86	7.54	ND	142.32	<1.0	<1.0	<1.0	<3	37	NA	NA	NA	NA
	06/24/1999	149.86	9.12	ND	140.74	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	149.86	8.64	ND	141.22	<5.0	<5.0	<5.0	<10	**489**	<5.0	<50	<NA	<50
	02/26/2001	149.86	9.20	ND	140.66	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	07/16/2001	149.86	9.00	ND	140.86	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	01/22/2002	149.86	9.82	ND	140.04	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	05/18/2004	149.55	9.41	ND	140.14	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	11/17/2004	149.55	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	149.55	9.31	ND	140.24	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	149.55	8.86	ND	140.69	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	149.55	8.11	ND	141.44	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/14/2006	149.55	9.36	ND	140.19	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/11/2007	149.55	9.80	ND	139.75	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	149.55	9.15	ND	140.4	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	149.55	9.65	ND	139.9	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	149.55	9.04	ND	140.51	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	149.55	8.85	ND	140.7	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	149.55	8.86	ND	140.69	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	149.55	9.81	ND	139.74	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-4	07/30/1998	147.61	7.92	ND	139.69	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
(GW-1,3)	09/11/1998	147.61	8.89	ND	138.72	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
2-15'	10/26/1998	147.61	11.98	ND	135.63	<1.0	<1.0	<1.0	<3	**99**	NA	NA	NA	NA
	11/13/1998	147.61	8.35	ND	139.26	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	12/17/1998	147.61	8.52	ND	139.09	<1.0	<1.0	<1.0	<3	4	NA	NA	NA	NA
	01/06/1999	147.61	7.94	ND	139.67	<1.0	<1.0	<1.0	<3	5	NA	NA	NA	NA
	02/09/1999	147.61	7.35	ND	140.26	<1.0	<1.0	<1.0	<3	5	NA	NA	NA	NA
	03/29/1999	147.61	7.15	ND	140.46	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	06/24/1999	147.61	8.20	ND	139.41	<1.0	<5.0	<5.0	<15	**82.2**	<5	<100	<100	<100
	11/04/1999	147.61	7.84	ND	139.77	<1.0	<5.0	<5.0	<15	6.2	<5.0	<100	<100	<100
	11/20/2000	147.61	7.65	ND	139.96	<5.0	<5.0	<5.0	<10	50.7	<5.0	<50	<50	<50
	02/26/2001	147.61	7.62	ND	139.99	<1.0	<5.0	<5.0	<15	**77.7**	<5	<100	<100	<100
	07/16/2001	147.61	8.10	ND	139.51	<5.0	<5.0	<5.0	<10	56	<5	<50	<50	<50
	01/22/2002	147.61	8.37	ND	139.24	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	05/07/2002	147.61	7.52	ND	140.09	<5.0	<5.0	<5.0	<10	**199**	<5.0	<50	<50	<50
	10/02/2002	147.61	9.42	ND	137.78	<2.0	<2.0	<2.0	<4.0	4.2	<3.0	<50	<50	<50
	05/10/2003	147.61	7.18	ND	140.02	<1.0	<1.0	<1.0	<1.0	**799**	NS	NS	NS	NS
	11/12/2003	147.61	7.92	ND	139.28	<2.0	<2.0	<2.0	<2.0	**78.4**	<3.0	<50	<50	<50
	05/18/2004	147.20	7.82	ND	139.38	<1.00	<3.0	<1.0	<6.0	**250**	<5.0	<100	<100	<100
	11/17/2004	147.20	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	147.20	8.05	ND	139.15	<1.00	<3.0	<1.0	<6.0	**321**	<5.0	<100	<100	<100
	12/16/2005	147.20	7.41	ND	139.79	<1.00	<3.00	<1.00	<4.00	8.23	<5.00	<100	<100	<100

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-4 (Continued)	06/27/2006	147.20	8.36	ND	138.84	<1.00	<3.00	<1.00	<4.00	23.3	<5.00	<100	<100	<100
	12/14/2006	147.20	8.02	ND	139.18	<1.00	<3.00	<1.00	<6.00	**260**	<5.00	<100	<100	<100
	07/11/2007	147.20	7.30	ND	139.90	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.20	7.70	ND	139.50	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.20	8.07	ND	139.13	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	147.20	8.01	ND	139.19	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.20	7.57	ND	139.63	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	147.20	8.02	ND	139.18	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	147.20	8.10	ND	139.1	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-5 (GW-1,3) *1-10'*	01/31/1997	144.43	4.84	ND	139.59	**24**	1.8	17	15.7	**274**	NA	NA	NA	NA
	04/03/1997	144.43	4.62	ND	139.81	<0.2	<0.2	<0.2	<0.4	<2.0	NA	NA	NA	NA
	07/21/1997	144.43	6.18	ND	138.25	**6**	<1.0	<1.0	<3	**290**	NA	NA	NA	NA
	10/22/1997	144.43	7.03	ND	138.25	**70**	5	10	<3	**3,100**	NA	NA	NA	NA
	05/04/1998	144.43	4.52	ND	139.91	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	07/30/1998	144.43	5.33	ND	139.10	**46**	20	36	37	**1,300**	NA	NA	NA	NA
	09/11/1998	144.43	6.16	ND	138.27	4	<1.0	<1.0	<3	**190**	NA	NA	NA	NA
	10/26/1998	144.43	5.38	ND	139.05	4	<1.0	<1.0	<3	54	NA	NA	NA	NA
	11/13/1998	144.43	5.48	ND	138.95	2	<1.0	<1.0	<3	29	NA	NA	NA	NA
	12/17/1998	144.43	5.76	ND	138.67	3	<1.0	<1.0	<3	52	NA	NA	NA	NA
	01/06/1999	144.43	5.23	ND	139.20	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	02/09/1999	144.43	4.70	ND	139.73	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	03/29/1999	144.43	4.50	ND	139.93	1	<1.0	<1.0	<3	9	NA	NA	NA	NA
	06/24/1999	144.43	5.65	ND	138.78	**7**	<5.0	<5.0	<15	**86.8**	<5.0	<100	<100	<100
	11/04/1999	144.43	4.96	ND	139.47	<1	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/03/2000	144.43	5.23	ND	139.20	<1	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	04/14/2000	144.43	4.89	ND	139.54	<1	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/22/2002	144.43	5.81	ND	138.62	<5.0	<5.0	<5.0	<10	**72.8**	<5.0	<50	<50	<50
	05/07/2002	144.43	4.66	ND	139.77	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/02/2002	143.66	6.39	ND	137.27	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	05/18/2004	143.66	5.05	ND	138.61	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	11/17/2004	143.66	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	143.66	6.3	ND	137.36	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	143.66	7.79	ND	135.87	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	143.66	4.11	ND	139.55	<1.00	<3.00	3.83	<4.00	**253**	<5.00	<100	<100	**534**
	12/14/2006	143.66	5.12	ND	138.54	<1.00	<3.00	<1.00	<6.00	6.87	<5.00	<100	<100	<100
	07/10/2007	143.66	5.44	ND	138.22	<1.00	<3.00	14.6	4.12	12.1	<5.00	287	344	**588**
	10/17/2007	143.66	6.03	ND	137.63	**5.06**	3.85	10.2	7.20	18.8	<5.00	<100	127	57.9
	01/08/2008	143.66	4.76	ND	138.9	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/21/2008	143.66	4.01	ND	139.65	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	143.66	5.17	ND	138.49	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	09/25/2008	143.66	5.20	ND	138.46	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	143.66	4.30	ND	139.36	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/10/2009	143.66	4.13	ND	139.53	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	143.66	4.48	ND	139.18	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	09/17/2009	143.66	5.04	ND	138.62	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	143.66	4.95	ND	138.71	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	04/21/2010	143.66	4.83	ND	138.83	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	143.66	5.21	ND	138.45	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-6 (GW-1,3) *1-15'*	04/03/1997	146.43	9.92	ND	136.51	**16**	ND	44	28.6	**1,720**	NA	NA	NA	NA
	07/21/1997	146.43	10.71	ND	135.72	**340**	370	63	250	**11,000**	NA	NA	NA	NA
	10/22/1997	146.43	11.38	ND	135.05	**2,200**	**4,400**	310	2,300	**14,000**	NA	NA	NA	NA
	05/04/1998	146.43	7.26	ND	139.17	**22**	2	73	<3	**570**	NA	NA	NA	NA
	09/11/1998	146.43	11.39	ND	135.04	**31**	<1.0	18	<3	**2,600**	NA	NA	NA	NA
	03/29/1999	146.43	7.25	ND	139.18	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	06/24/1999	146.43	15.00	ND	131.43	<1.0	<5.0	<5.0	<15	6.6	<5.0	<100	<100	<100
	11/04/1999	146.43	7.60	ND	138.83	**102**	5.9	170	295.2	**15,500**	55.6	**<2,000**	**<2,000**	**2,300**
	01/03/2000	146.43	7.65	ND	138.78	**290**	<25	161	501	**21,700**	59	**<500**	**1,090**	**3,500**
	02/16/2000	146.43	9.07	ND	137.36	**286**	<25	194	659	**12,700**	52	**<500**	**1,480**	**3,050**
	02/25/2000	146.43	6.97	ND	139.46	**270**	8	190	650	**11,000**	NS	NS	NS	NS
	04/14/2000	146.43	NG	NG	NA	**26.8**	<5.0	<5.0	<15	**2,210**	<5.0	<100	<100	<100
	08/21/2000	146.43	9.41	ND	137.02	**51.3**	<5.0	33.4	<17.1	**4,120**	<5.0	<100	<100	150
	11/20/2000	146.43	9.00	ND	137.43	<5	<5.0	<5.0	<10	**216**	<5.0	<50	<50	<50
	02/26/2001	146.43	8.82	ND	137.61	**5**	<5.0	<5	<15	**156**	<5.0	<100	<100	<100
	07/16/2001	146.43	9.72	ND	136.71	**17.7**	<10	36.2	<20	**6,370**	11.1	<100	151	**272**

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 1 Summary of Groundwater Data - VPH												
Well No. (GW Class) *Screen Interval (ft.)*	**Sampling Date**	**Top of Casing Elevation** (ft)	**Depth to Water** (ft)	**Depth to LNAPL** (ft)	**Ground Water Elevation** (ft)	**Benzene** (µg/L)	**Toluene** (µg/L)	**Ethyl-benzene** (µg/L)	**Total Xylenes** (µg/L)	**MTBE** (µg/L)	**Naph-thalene** (µg/L)	**C5-C8 Aliphatics** (µg/L)	**C9-C12 Aliphatics** (µg/L)	**C9-C10 Aromatics** (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-6 (Continued)	01/22/2002	146.43	9.91	ND	136.52	<5.0	<5.0	<5.0	<10	13.7	<5.0	<50	<50	<50
	05/07/2002	146.43	8.74	ND	137.69	**74**	34.3	116	191	**1,380**	24	<50	274	**841**
	05/10/2003	147.09	5.53	ND	141.56	<2.0	<2.0	<2.0	<4.0	28.2	<3.0	<50	<50	<50
	11/12/2003	147.09	NG	NG	NA	<2.0	<2.0	<2.0	<4.0	3.8	< 3.0	<50	<50	<50
	05/18/2004	147.09	9.05	ND	138.04	<1.00	<3.0	<1.0	<6.0	15.4	<5.0	<100	<100	<100
	11/19/2004	147.09	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/02/2005	147.09	8.92	ND	138.17	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	147.09	7.68	ND	139.41	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	147.09	7.81	ND	139.28	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	147.09	8.72	ND	138.37	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	147.09	9.08	ND	138.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10/17/2007	147.09	10.59	ND	136.5	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.09	8.41	ND	138.68	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/21/2008	147.09	7.86	ND	139.23	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.09	8.87	ND	137.56	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	09/25/2008	147.09	8.98	ND	137.45	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.09	8.04	ND	138.39	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/10/2009	147.09	7.94	ND	138.49	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.09	8.3	ND	138.13	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	09/17/2009	147.09	8.80	ND	137.63	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	147.09	8.22	ND	138.21	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	04/21/2010	147.09	8.52	ND	137.91	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	147.09	9.38	ND	137.05	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-7 (GW-1,3) *1-15'*	05/20/1998	145.82	5.49	ND	140.33	<1	<1	<1	<3	<1	NA	NA	NA	NA
	10/26/1998	145.82	7.69	ND	138.13	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	145.82	7.65	ND	138.17	<1.0	<1.0	<1.0	<3	7	NA	NA	NA	NA
	12/17/1998	145.82	7.92	ND	137.90	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	01/06/1999	145.82	7.35	ND	138.47	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	145.82	7.05	ND	138.77	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	03/29/1999	145.82	6.88	ND	138.94	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	06/24/1999	145.82	8.67	ND	137.15	<1.0	<5.0	<5.0	<15	9.3	<5.0	<100	<100	<100
	02/16/2000	145.82	7.15	ND	138.67	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	145.82	7.45	ND	138.37	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	01/22/2002	145.82	8.10	ND	137.72	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	05/07/2002	145.82	7.17	ND	138.65	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/02/2002	145.42	8.32	ND	137.10	<2.0	<2.0	<2.0	<4.0	2.5	<3.0	<50	<50	<50
OW-8 (GW-1,3) *2-15'*	05/20/1998	146.28	7.69	ND	138.59	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	07/30/1998	146.28	8.18	ND	138.10	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	09/11/1998	146.28	8.75	ND	137.53	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	146.28	8.09	ND	138.19	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	146.28	8.07	ND	138.21	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	146.28	8.33	ND	137.95	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	146.28	7.75	ND	138.53	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	146.28	7.48	ND	138.80	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	03/29/1999	146.28	7.23	ND	139.05	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	06/24/1999	146.28	8.46	ND	137.82	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	146.28	7.81	ND	138.47	<5.0	<5.0	<5.0	10	<5.0	<5.0	<50	<50	<50
	01/22/2002	146.28	8.43	ND	137.85	<5.0	<5.0	<5.0	10	<5.0	<5.0	<50	<50	<50
OW-9 (GW-1,3) *1-15'*	07/30/1998	147.49	8.60	ND	138.89	<1.0	<1.0	<1.0	<3	24	NA	NA	NA	NA
	09/11/1998	147.49	9.23	ND	138.26	<1.0	<1.0	<1.0	<3	6	NA	NA	NA	NA
	10/26/1998	147.49	8.60	ND	138.89	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	11/13/1998	147.49	8.64	ND	138.85	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	12/17/1998	147.49	8.94	ND	138.55	<1.0	<1.0	<1.0	<3	4	NA	NA	NA	NA
	01/06/1999	147.49	8.27	ND	139.22	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	02/09/1999	147.49	7.88	ND	139.61	<1.0	<1.0	<1.0	<3	18	NA	NA	NA	NA
	03/29/1999	147.49	7.79	ND	139.70	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA
	06/24/1999	147.49	9.09	ND	138.40	2.6	<5	<5	61.5	27.3	8.4	<100	<100	<100
	11/04/1999	147.49	8.18	ND	139.31	**8.6**	97.3	39.3	191.4	**1,830**	6.2	<100	100	180
	01/03/2000	147.49	8.44	ND	139.05	<1.0	<5.0	<5.0	<15	**592**	<5.0	<100	<100	<100
	04/14/2000	147.49	NG	NG	NA	**18.6**	20	30.6	101.6	**670**	<5.0	<100	220	**290**
	08/21/2000	147.49	9.53	ND	137.96	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	147.49	8.95	ND	138.54	<5.0	<5.0	<5.0	<10	**726**	<5.0	<50	<50	<50
	02/26/2001	147.49	8.72	ND	138.77	**14.8**	<5.0	18.2	<15	**393**	<5.0	<100	<100	<100

95-214880
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Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-9 (Continued)	01/22/2002	147.49	10.18	ND	137.31	<5.0	<5.0	<5.0	<10	10.8	<5.0	<50	<50	<50
	11/12/2003	147.40	9.45	ND	137.95	<2.0	<2.0	<2.0	<2.0	6.1	<3.0	<50	<50	<50
	05/18/2004	147.40	9.10	ND	138.30	<1.00	<3.0	1.1	<6.0	29.4	<5.0	<100	<100	<100
	11/19/2004	147.40	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/02/2005	147.40	8.07	ND	139.33	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	147.40	8.07	ND	139.33	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	147.40	9.05	ND	138.35	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	147.40	9.25	ND	138.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.40	8.39	ND	139.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.40	9.03	ND	138.37	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.40	8.15	ND	139.25	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.40	8.41	ND	138.99	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	147.40	8.53	ND	138.87	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	147.40	9.24	ND	138.16	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-10 (GW-1,3) *Total depth = 17.5'*	04/03/1997	146.59	6.44	ND	140.15	**19**	2.2	20	21	**72**	NA	NA	NA	NA
	07/21/1997	146.59	8.64	ND	137.95	**34**	5	46	8	**340**	NA	NA	NA	NA
	10/22/1997	146.59	9.58	ND	137.01	**230**	420	240	890	**12,000**	NA	NA	NA	NA
	05/04/1998	146.59	7.09	ND	139.50	**21**	<1	35	3	**570**	NA	NA	NA	NA
	07/30/1998	146.59	7.85	ND	138.74	**60**	90	90	380	**1,500**	NA	NA	NA	NA
	09/11/1998	146.59	9.70	ND	136.89	**40**	7	50	95	**640**	NA	NA	NA	NA
	10/26/1998	146.59	7.87	ND	138.72	**120**	39	98	240	**880**	NA	NA	NA	NA
	11/13/1998	146.59	8.01	ND	138.58	**74**	19	73	200	**630**	NA	NA	NA	NA
	12/17/1998	146.59	8.28	ND	138.31	**55**	6	51	99	**390**	NA	NA	NA	NA
	01/06/1999	146.59	7.68	ND	138.91	**100**	<20	110	170	**840**	NA	NA	NA	NA
	02/09/1999	146.59	7.15	ND	139.44	**28**	3	22	25	**470**	NA	NA	NA	NA
	03/29/1999	146.59	6.96	ND	139.63	**61**	89	57	90	**630**	NA	NA	NA	NA
	06/24/1999	146.59	8.13	ND	138.46	**122**	59	133	389	**938**	<25	**<500**	<500	**<500**
	11/04/1999	146.59	7.52	ND	139.07	**23.3**	<5.0	18.5	<15	**155**	<5.0	<100	<100	110
	01/03/2000	146.59	7.76	ND	138.83	**39**	<5.0	25.6	<15	**204**	<5.0	<100	<100	110
	02/16/2000	146.59	7.32	ND	139.27	**7.5**	<5.0	<5.0	<15	67.9	<5.0	<100	<100	<100
	04/14/2000	146.59	7.39	ND	139.20	**41.7**	57.6	35.4	76.2	**266**	<5.0	<100	<100	110
	08/21/2000	146.59	8.05	ND	138.54	**107**	614	171	671	**2,610**	*<25*	**<500**	590	**840**
	11/20/2000	146.59	7.51	ND	139.08	**194**	**1,410**	320	2,010	**14,900**	83.8	<50	**1,420**	**1,580**
	02/26/2001	146.59	7.33	ND	139.26	**16**	<5.0	21.5	39.9	**556**	6.3	<100	<100	<100
	07/16/2001	146.59	8.16	ND	138.43	**<50**	<50	<50	<100	**749**	<50	**<500**	<500	**<500**
	10/02/2002	146.31	8.92	ND	137.39	<2.0	<2.0	<2.0	<4.0	**110**	<3.0	<50	<50	<50
	11/13/2003	146.31	7.71	ND	138.60	<2.0	<2.0	<2.0	<4.0	26.7	<3.0	<50	<50	<50
	05/18/2004	146.31	7.55	ND	138.76	**<14.3**	<3.0	2.1	6.2	**336**	<5.0	<100	<100	<100
	11/17/2004	146.31	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	**193**	<5.0	<100	<100	<100
	06/02/2005	146.31	7.55	ND	138.76	**6.4**	3.2	3.8	10.5	**216**	<5.0	<100	<100	<100
	12/15/2005	146.31	7.30	ND	139.01	<1.00	<3.00	3.91	<4.00	57.7	<5.00	<100	<100	65.9
	12/14/2006	146.31	7.65	ND	138.66	<1.00	<3.00	6.13	30.4	48.7	<5.00	<100	140	**276**
	07/10/2007	146.31	7.89	ND	138.42	3.74	<3.00	7.0	14.78	11.4	<5.00	186	257	**415**
	10/17/2007	146.31	8.58	ND	137.73	**25.4**	5.84	120	16.48	20.5	<5.00	**865**	621	**343**
	01/08/2008	146.31	7.24	ND	139.07	1.36	13.5	8.85	68.8	8.97	<5.00	<100	<100	**227**
	03/21/2008	146.31	6.43	ND	139.88	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	146.31	7.67	ND	138.64	2.37	<3.00	7.88	10.59	<3.00	<5.00	<100	<100	<100
	09/25/2008	146.31	7.70	ND	138.61	**10.3**	<3.00	28.0	17.57	4.17	<5.00	147	<100	132
	12/18/2008	146.31	6.80	ND	139.51	<1.00	<3.00	4.16	23.44	<3.00	<5.00	<100	<100	<100
	03/10/2009	146.31	6.61	ND	139.70	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	146.31	7.00	ND	139.31	1.88	<3.00	10.2	2.82	<3.00	<5.00	<100	<100	59.4
	09/17/2009	146.31	7.40	ND	138.91	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	146.31	7.35	ND	138.96	<1.00	<3.00	2.55	9.37	<3.00	<5.00	<100	<100	87.9
	04/21/2010	146.31	7.16	ND	139.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	146.31	7.81	ND	138.50	**5.20**	<3.00	29.0	<6.00	<3.00	<5.00	122	<100	114
	06/28/2011	146.31	7.25	ND	139.06	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	03/08/2012	146.31	7.21	ND	139.10	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	06/20/2012	146.31	7.81	ND	138.50	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	09/10/2012	146.31	6.60	ND	139.71	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	12/12/2012	146.31	8.90	ND	137.41	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	06/19/2013	146.31	7.05	ND	139.26	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	12/16/2013	146.31	8.11	ND	138.20	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	03/31/2015	146.31	6.64	ND	139.67	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100

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Table 1
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Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-11	11/20/2000	145.88	9.67	ND	136.21	**14.6**	<5.0	<5.0	<10	**4,320**	<5.0	<50	<50	88.2
(GW-1,3)	05/18/2004	147.24	8.48	ND	138.76	<1.0	<3.0	<1.0	<6.0	14.1	<5.0	<100	<100	<100
5-20'	12/14/2006	147.24	3.53	ND	143.71	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	DESTROYED													
OW-12	10/02/2002	147.64	10.13	ND	137.51	**34.9**	<2.0	120	50.1	**3,420**	34.6	<50	276	**987**
(GW-1,3)	11/13/2003	147.64	8.95	ND	138.69	2.8	4.8	147	458	**167**	26.9	<50	<50	**754**
5-18'	06/20/2005	147.64	8.66	ND	138.98	1.20	82.3	493	1,229	**290**	138	**646**	**<1,000**	**3,460**
	12/16/2005	147.64	7.98	ND	139.66	<1.00	<3.00	2.73	<4.00	<3.00	<5.00	<100	<100	82.6
	06/27/2006	147.64	7.7	ND	139.94	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/14/2006	147.64	8.75	ND	138.89	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	131	<100
	07/11/2007	147.64	9.24	ND	138.40	<1.00	<3.00	12.3	<6.00	<3.00	<5.00	<100	117	127
	01/08/2008	147.64	8.53	ND	139.11	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	**248**
	06/20/2008	147.64	8.92	ND	138.72	1.23	<3.00	52.9	4.33	3.18	<5.00	286	593	**910**
	06/22/2009	147.64	8.25	ND	139.39	<1.00	<3.00	2.89	<6.00	<3.00	6.83	**444**	**1,060**	**1,750**
	12/23/2009	147.64	8.51	ND	139.13	1.42	<3.00	3.49	<6.00	<3.00	8.13	**588**	<0.5	**1,600**
	06/10/2010	147.64	9.12	ND	138.52	**5.02**	3.24	11.6	6.94	<3.00	6.20	**603**	<0.5	**1,330**
	09/30/2010	147.64	10.22	ND	137.42	**15.6**	<10.0	<10.0	<30.0	<10	32.3	**304**	**884**	**400**
	12/29/2010	147.64	8.93	ND	138.71	<5.00	<5.00	<5.00	<15.00	<5.00	<5.00	<75	<25	<25
	03/31/2011	147.64	8.02	ND	139.62	<5.00	<5.00	<5.00	<5.00	<5.00	17.7	179	459	**244**
	06/28/2011	147.64	8.25	ND	139.39	<5.0	<5.0	<5.0	<10.0	<5.0	13.1	136	328	158
	09/28/2011	147.64	8.80	ND	138.84	<5.0	<5.0	<5.0	<10.0	<5.0	15.2	163	291	142
	12/22/2011	147.64	8.51	ND	139.13	<5.0	<5.0	<5.0	<10.0	<5.0	19.0	166	403	172
	03/08/2012	147.64	8.48	ND	139.16	<5.0	<5.0	<5.0	<10.0	<5.0	16.8	115	163	138
	06/20/2012	147.64	9.06	ND	138.58	<5.0	<5.0	<5.0	<15.0	<5.0	35.9	233	217	**418**
	09/10/2012	147.64	9.65	ND	137.99	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	12/12/2012	147.64	9.17	ND	138.47	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	84.1	105
	03/27/2013	147.64	8.07	ND	139.57	<5.0	<5.0	<5.0	<15.0	<5.0	19.8	97.9	101	122
	06/19/2013	147.64	8.25	ND	139.39	<5.0	<5.0	<5.0	<15.0	<5.0	18.4	107	118	123
	12/16/2013	147.64	9.45	ND	138.19	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	03/26/2014	147.64	8.32	ND	139.32	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	06/30/2014	147.64	9.30	ND	138.34	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	110
	09/11/2014	147.64	9.60	ND	138.04	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	110
	12/08/2014	147.64	7.96	ND	139.68	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	110	<100
	03/12/2015	147.64	7.80	ND	139.84	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/17/2015	147.64	9.60	ND	138.04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	150	<100
	12/16/2015	147.64	9.25	ND	138.39	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/08/2016	147.64	8.71	ND	138.93	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/07/2016	147.64	8.98	ND	138.66	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	160	<100
	09/26/2016	147.64	9.77	ND	137.87	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/20/2016	147.64	8.93	ND	138.71	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/28/2017	147.64	8.24	ND	139.40	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/28/2017	147.64	8.70	ND	138.94	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	09/19/2017	147.64	9.40	ND	138.24	<1.0	<1.0	2.1	1.6	<1.0	<5.0	<100	<100	130
	12/27/2017	147.64	9.14	ND	138.50	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	03/19/2018	147.64	7.80	ND	139.84	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/06/2018	147.64	8.94	ND	138.70	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/03/2018	147.64	7.48	ND	140.16	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
OW-13	10/02/2002	147.67	10.02	ND	137.65	2.7	5.6	58.4	85.6	7.3	14.2	<50	<50	**206**
(GW-1,3)	06/20/2005	147.67	8.40	ND	139.27	< 1.00	57.5	688	3,933	**1,130**	**286**	**933 J**	**<2,500**	**6,840**
5-20'	12/16/2005	147.67	7.65	ND	140.02	<1.00	<3.00	64.0	572	<3.00	27.0	166	**1,230**	**998**
	06/27/2006	147.67	8.51	ND	139.16	<1.00	<3.00	58.6	82.9	3.77	15.8	<100	590	**518**
	12/14/2006	147.67	8.64	ND	139.03	<1.00	<3.00	157	258.9	<3.00	104	**559**	**2,000**	**3,970**
	07/11/2007	147.67	9.18	ND	138.49	<1.00	3.95	205	844	<3.00	125	**467**	**4,480**	**4,570**
	10/17/2007	147.67	9.69	ND	137.98	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.67	9.37	ND	138.30	<1.00	6.05	305	980	<3.00	**147**	**761**	<100	**8,460**
	03/21/2008	147.67	7.45	ND	140.22	<1.00	3.35	213	647	<3.00	84.7	**560**	**780**	**3,020**
	3/21/2008 (Dup)	147.67	7.45	ND	140.22	<1.00	3.16	201	603	<3.00	77.4	**496**	**876**	**3,090**
	06/20/2008	147.67	8.75	ND	138.92	2.07	3.51	2.82	892	4.62	93.1	**421**	**2,540**	**4,370**
	09/25/2008	147.67	8.84	ND	138.83	3.10	<3.00	223	704	<3.00	89.6	**469**	<500	**4,160**
	12/23/2008	147.67	8.17	ND	139.50	<1.00	<3.00	271	1,107	<3.00	116	**673**	682	**6,340**
	03/10/2009	147.67	7.65	ND	140.02	1.36	<3.00	50.8	191.9	<3.00	26.3	**310**	657	**1,380**
	06/22/2009	147.67	7.94	ND	139.73	<1.00	<3.00	207	646	7.64	89.2	**866**	**2,780**	**5,160**
	09/17/2009	147.67	NG	ND	NA	<1.00	<3.00	5.82	17.47	<3.00	5.47	<100	<100	136
	12/23/2009	147.67	8.30	ND	139.37	2.13	<3.00	161	550	4.94	75.9	**1,040**	**1,580**	**5,260**
	04/21/2010	147.67	8.19	ND	139.48	<1.00	<3.00	41.4	92.8	<3.00	16.0	198	<500	**947**

95-214880
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Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-13 (Continued)	06/10/2010	147.67	8.80	ND	138.87	1.60	<3.00	118	300.4	<3.00	47.1	**622**	**712**	**2,360**
	09/30/2010	147.67	10.15	ND	137.52	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	26	<25
	12/29/2010	147.67	9.76	ND	137.91	<5.00	<5.00	48	104.0	<5.00	22.0	164	**839**	**458**
	03/31/2011	147.67	7.85	ND	139.82	<5.00	<5.00	99	303.5	<5.00	28.4	290	**1,510**	**896**
	06/28/2011	147.67	8.11	ND	139.56	<5.0	<5.0	29.8	51.1	<5.0	20.6	**305**	**1,140**	**594**
	09/28/2011	147.67	8.66	ND	139.01	<5.0	<5.0	83.8	180.1	<5.0	45.7	**341**	**2,010**	**1,310**
	12/22/2011	147.67	8.18	ND	139.49	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	03/08/2012	147.67	8.32	ND	139.35	<5.0	<5.0	76.7	217.3	<5.0	28.5	220	**1,210**	**982**
	06/20/2012	147.67	8.89	ND	138.78	<5.0	<5.0	69.3	151.8	<5.0	44.5	**383**	**764**	**1,780**
	09/10/2012	147.67	9.42	ND	138.25	<5.0	<5.0	22.6	55.3	<5.0	15.2	139	529	**649**
	12/12/2012	147.67	9.02	ND	138.65	<5.0	<5.0	60.8	110.7	<5.0	29.8	181	**916**	**1,320**
	03/27/2013	147.67	7.85	ND	139.82	<5.0	<5.0	65.5	193.4	<5.0	22.8	187	608	**892**
	06/19/2013	147.67	8.02	ND	139.65	<5.0	<5.0	5.9	<10.0	<5.0	8.3	80.3	201	**247**
	12/16/2013	147.67	9.28	ND	138.39	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	03/26/2014	147.67	8.16	ND	139.51	<5.0	<5.0	25.7	46.3	<5.0	13.5	154	328	**505**
	06/30/2014	147.67	10.42	ND	137.25	2.4	<2.0	23	42.0	<2.0	10	<200	<200	**650**
	09/11/2014	147.67	9.52	ND	138.15	<1.0	<1.0	5.7	8.0	<1.0	<5.0	<100	290	**220**
	12/08/2014	147.67	7.79	ND	139.88	<1.0	<1.0	12	18.9	<1.0	13	120	<100	**460**
	03/31/2015	147.67	7.60	ND	140.07	<1.0	<1.0	51	157	<1.0	15	**320**	<100	**950**
	09/17/2015	147.67	9.50	ND	138.17	<1.0	<1.0	2.8	4.9	<1.0	<5.0	<100	<100	130
	12/16/2015	147.67	9.15	ND	138.52	<1.0	<1.0	6.6	15.5	<1.0	<5.0	<100	<100	**340**
	03/08/2016	147.67	8.55	ND	139.12	<1.0	<1.0	15	23.4	<1.0	6.8	230	<100	**670**
	06/07/2016	147.67	8.86	ND	138.81	<1.0	<1.0	14	24.9	<1.0	6.1	250	<100	**820**
	09/26/2016	147.67	9.70	ND	137.97	<1.0	<1.0	3.2	5.1	<1.0	<5.0	<100	<100	170
	12/20/2016	147.67	8.79	ND	138.88	<5.0	<5.0	29	63.6	<5.0	65	**520**	<500	**1,400**
	03/28/2017	147.67	8.11	ND	139.56	<1.0	<1.0	15	39.5	<1.0	5.7	190	<100	**700**
	06/28/2017	147.67	8.52	ND	139.15	<2.0	<2.0	14	23.3	2.0	12	270	<200	**1,200**
	09/19/2017	147.67	9.30	ND	138.37	<2.0	<2.0	14	26	<2.0	12	<200	<200	**870**
	12/27/2017	147.67	9.04	ND	138.63	<1.0	<1.0	4.1	8.5	<1.0	<5.0	<100	160	130
	03/19/2018	147.67	8.06	ND	139.61	2.2	1.2	<1.0	<3.0	<1.0	<5.0	140	270	160
	06/06/2018	147.67	8.79	ND	138.88	<1.0	<1.0	3.4	4.6	<1.0	<5.0	<100	<100	**220**
	12/03/2018	147.67	7.15	ND	140.52	<1.0	<1.0	1.4	2.9	<1.0	<5.0	<100	190	160
	03/25/2019	147.67	7.88	ND	139.79	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/24/2019	147.67	8.34	ND	139.33	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	10/17/2019	147.67	8.43	ND	139.24	<1.0	<1.0	1.2	2.9	<1.0	<5.0	120	<100	**240**
	12/18/2019	147.67	7.66	ND	140.01	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	05/11/2020	147.67	8.35	ND	139.32	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	**260**
	09/24/2020	147.67	9.73	ND	137.94	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/21/2020	147.67	9.66	ND	138.01	<1.0	<1.0	3.7	9.6	<1.0	5.8	<100	<100	**450**
	03/22/2021	147.67	8.36	ND	139.31	<2.0	<2.0	7.6	20.4	<1.0	10	290	410	**1,200**
	06/16/2021	147.67	8.71	ND	138.96	<1.0	<1.0	1.1	<3.0	<1.0	<5.0	130	170	**420**
	09/17/2021	147.67	8.46	ND	139.21	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	110	<100	**330**
	12/17/2021	147.67	8.63	ND	139.04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	340	**300**
	03/16/2022	147.67	8.15	ND	139.52	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	**210**
	07/11/2022	147.67	9.32	ND	138.35	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	130
	09/27/2022	147.67	9.32	ND	138.35	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	147.67	8.10	ND	139.57	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	147.67	8.27	ND	139.40	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	**220**
OW-14 (GW-1,3)	11/19/2004	148.01	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/02/2005	148.01	9.29	ND	138.72	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	148.01	8.80	ND	139.21	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	148.01	8.61	ND	139.40	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	148.01	9.91	ND	138.10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10/17/2007	148.01	10.47	ND	137.54	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	148.01	9.28	ND	138.73	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/21/2008	148.01	8.46	ND	139.55	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	148.01	9.70	ND	138.31	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	09/25/2008	148.01	9.80	ND	138.21	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	148.01	8.83	ND	139.18	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/10/2009	148.01	8.71	ND	139.30	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	148.01	9.12	ND	138.89	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	09/17/2009	148.01	9.51	ND	138.50	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	148.01	9.22	ND	138.79	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	04/21/2010	148.01	9.30	ND	138.71	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	148.01	9.98	ND	138.03	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

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Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
MW-1	07/30/1998	147.59	7.11	ND	140.48	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
(GW-1,3)	09/11/1998	147.59	8.01	ND	139.58	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
5-15'	10/26/1998	147.59	7.68	ND	139.91	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	147.59	7.88	ND	139.71	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	147.59	7.72	ND	139.87	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	147.59	7.65	ND	139.94	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	147.59	6.35	ND	141.24	<1.0	<1.0	<1.0	<3	23	NA	NA	NA	NA
	03/29/1999	147.59	5.65	ND	141.94	<1.0	<1.0	<1.0	<3	50	NA	NA	NA	NA
	06/24/1999	147.59	7.08	ND	140.51	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/22/2002	147.59	8.93	ND	138.66	<5.0	<5.0	<5.0	<10	24.3	<5.0	<50	<50	<50
	05/10/2003	147.21	6.33	ND	140.88	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	11/13/2003	147.21	7.67	ND	138.54	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	06/28/2011	147.21	6.80	ND	140.41	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	03/26/2014	147.21	6.60	ND	140.61	<5.0	<5.0	<5.0	<10.0	<5.0	6.78	<75.0	<25.0	<25.0
	06/30/2014	147.21	7.61	ND	139.60	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	09/11/2014	147.21	7.97	ND	139.24	1.8	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	12/08/2014	147.21	6.19	ND	141.02	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/17/2015	147.21	8.00	ND	139.21	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/16/2015	147.21	7.90	ND	139.31	<1.0	<1.0	<1.0	<3.0	<1.0	15	<100	<100	<100
	03/08/2016	147.21	6.98	ND	140.23	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/07/2016	147.21	7.50	ND	139.71	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/26/2016	147.21	8.30	ND	138.91	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/20/2016	147.21	7.33	ND	139.88	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/28/2017	147.21	6.41	ND	140.80	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/28/2017	147.21	7.03	ND	140.18	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	09/19/2017	147.21	7.81	ND	139.40	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	03/19/2018	147.21	6.26	ND	140.95	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/06/2018	147.21	7.28	ND	139.93	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/03/2018	147.21	5.49	ND	141.72	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/25/2019	147.21	6.20	ND	141.01	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/24/2019	147.21	6.81	ND	140.40	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	10/17/2019	147.21	7.50	ND	139.71	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/18/2019	147.21	5.67	ND	141.54	<2.0	<2.0	<2.0	<6.0	<2.0	<10	<200	<200	<200
	05/11/2020	147.21	6.61	ND	140.60	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/24/2020	147.21	8.07	ND	139.14	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/21/2020	147.21	7.01	ND	140.20	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/22/2021	147.21	6.71	ND	140.50	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/16/2021	147.21	7.16	ND	140.05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/17/2021	147.21	6.73	ND	140.48	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/17/2021	147.21	6.96	ND	140.25	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/16/2022	147.21	6.31	ND	140.90	<2.0	<2.0	<2.0	<6.0	<2.0	<10.0	<200	<200	<200
	07/11/2022	147.21	7.65	ND	139.56	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/27/2022	147.21	7.89	ND	139.32	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	147.21	6.42	ND	140.79	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	147.21	6.43	ND	140.78	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
MW-2	04/03/1997	147.95	6.86	ND	141.09	**821**	**3,790**	381	2,484	**19,300**	NA	NA	NA	NA
(GW-1,2,3)	07/21/1997	147.95	8.91	ND	139.04	**1,100**	**4,400**	480	3,600	***100,000***	NA	NA	NA	NA
5-15'	10/22/1997	147.95	10.08	ND	137.87	***2,600***	**4,900**	**810**	5,900	***190,000***	NA	NA	NA	NA
	05/04/1998	147.95	7.58	ND	140.37	**1,400**	**8,500**	**900**	6,900	**14,000**	NA	NA	NA	NA
	05/20/1998	147.95	NG	NG	NA	**880**	**3,300**	320	2,600	***80,000***	NA	NA	NA	NA
	07/30/1998	147.95	7.97	ND	139.98	**890**	**4,700**	600	4,600	**2,500**	NA	NA	NA	NA
	09/11/1998	147.95	8.65	ND	139.30	**460**	**4,200**	550	4,000	**1,800**	NA	NA	NA	NA
	10/26/1998	147.95	8.37	ND	139.58	**210**	**1,800**	250	2,000	**5,500**	NA	NA	NA	NA
	11/13/1998	147.95	8.54	ND	139.41	**<500**	**1,700**	280	2,200	**5,100**	NA	NA	NA	NA
	12/17/1998	147.95	8.69	ND	139.26	**510**	**3,200**	540	3,900	**16,000**	NA	NA	NA	NA
	01/06/1999	147.95	8.24	ND	139.71	**<2,000**	**3,300**	400	3,400	**34,000**	NA	NA	NA	NA
	02/09/1999	147.95	6.90	ND	141.05	**1,500**	**8,900**	**800**	5,800	**15,000**	NA	NA	NA	NA
	03/29/1999	147.95	6.72	ND	141.23	**640**	**3,500**	640	4,500	**4,400**	NA	NA	NA	NA
	06/24/1999	147.95	8.25	ND	139.70	**513**	**5,890**	**1,110**	7,160	**10,300**	**280**	***4,000***	***6,100***	***9,000***
	11/04/1999	147.95	7.48	ND	140.47	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/03/2000	147.95	8.37	ND	139.58	**1,580**	**6,430**	**890**	5,220	***60,100***	**240**	**<2500**	***5,400***	***11,300***
	02/16/2000	147.95	7.83	ND	140.12	**1,630**	**8,130**	**1,030**	6,090	**35,900**	**220**	**<2500**	***7,700***	***10,200***
	02/25/2000	147.95	7.54	ND	140.41	**1,100**	**6,600**	660	4,400	**27,000**	NS	NS	NS	NS
	04/14/2000	147.95	7.40	ND	140.55	**1,500**	**11,600**	**1,320**	7,980	**22,000**	**310**	***<5,000***	***8,800***	***9,400***
	08/21/2000	147.95	8.35	ND	139.60	**1,330**	**8,860**	**1,300**	8,240	**29,000**	**340**	***<5,000***	***6,800***	***11,800***
	11/20/2000	147.95	7.60	ND	140.35	***2,410***	**13,800**	**2,230**	***14,970***	**40,700**	**646**	***<5,000***	***8,130***	***21,400***

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
MW-2 (Continued)	02/26/2001	147.95	7.67	ND	140.28	**658**	**5,220**	**1,010**	6,390	**11,000**	**251**	**2,000**	***9,000***	***7,900***
	07/16/2001	147.95	7.73	ND	140.22	***2,910***	**11,900**	**1,480**	*9,500*	***61,500***	**439**	**<2,500**	***11,200***	***14,200***
	01/22/2002	147.95	8.70	ND	139.25	**1,830**	**13,300**	**2,550**	***18,820***	**22,900**	***1,420***	***10,600***	***17,500***	***55,600***
	05/07/2002	147.95	7.66	ND	140.29	**588**	**9,840**	**1,700**	***12,260***	**6,620**	**454**	***7,550***	***7,800***	***16,600***
	10/02/2002	147.55	9.43	ND	138.12	**205**	**2,360**	**900**	5,780	**6,850**	**288**	**1,390**	**2,300**	***7,820***
	05/10/2003	147.55	7.20	ND	140.35	**51.6**	**3,440**	**825**	8,110	**1,140**	**511**	***7,350***	<50	***11,000***
	11/13/2003	147.55	8.29	ND	139.26	**19.5**	697	404	2,359	**2,910**	**309**	**456**	667	***9,750***
	05/18/2004	147.55	7.95	ND	139.60	1.6	549	490	2,894	**159**	**186**	**1,990**	**3,360**	***7,550***
	11/18/2004	147.55	NG	NG	NA	1.4	408	324	2,868	**98.4**	**144**	**2,260**	**3,860**	**4,650**
	06/20/2005	147.55	7.96	ND	139.59	< 1.00	95.4	381	2,369	**231**	131	**2,430**	<1,000	**4,110**
	12/16/2005	147.55	7.48	ND	140.07	<1.00	24.7	85.9	454	63.7	33.9	**703**	<500	**1,710**
	06/27/2006	147.55	6.82	ND	140.73	<1.00	<3.00	10.7	32.97	58.3	5.74	110	<100	**277**
	12/14/2006	147.55	8.02	ND	139.53	2.66	6.94	88.8	257.5	<3.00	33.0	**1,210**	674	**2,020**
	07/11/2007	147.55	8.42	ND	139.13	<1.00	5.00	79.1	257.9	<3.00	39.5	**1,400**	**2,630**	**3,010**
	10/17/2007	147.55	9.06	ND	138.49	<1.00	4.96	48.8	112.1	<3.00	20.9	**768**	**1,530**	**1,120**
	01/08/2008	147.55	7.76	ND	139.79	<1.00	6.09	93.6	387.6	<3.00	50.9	**1,180**	<500	**2,910**
	03/21/2008	147.55	6.85	ND	140.70	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.55	8.19	ND	139.36	<1.00	6.52	86.0	243.9	11.5	46.8	**1,350**	**1,220**	**2,690**
	09/25/2008	147.55	8.18	ND	139.37	**5.90**	<3.00	52.0	112.8	<3.00	30.3	**786**	<500	**1,900**
	25-Sep-08 Dup	147.55	8.18	ND	139.37	**5.94**	<3.00	50.7	114.6	<3.00	28.1	**803**	<500	**1,780**
	12/23/2008	147.55	7.50	ND	140.05	1.84	3.71	56.1	218.2	3.74	36.4	**1,060**	566	**2,950**
	03/10/2009	147.55	7.01	ND	140.54	1.89	<3.00	23.3	66.7	<3.00	14.9	**597**	**750**	**1,290**
	3/10/2009 Dup	147.55	7.01	ND	140.54	1.96	<3.00	23.3	66.5	<3.00	14.9	**609**	**700**	**1,220**
	06/22/2009	147.55	7.32	ND	140.23	4.96	3.46	35.6	118.2	6.32	29	**1,040**	**1,520**	**2,140**
	09/17/2009	147.55	7.80	ND	139.75	1.69	<3.00	16.4	44.7	3.52	12.5	**418**	<500	**761**
	9/17/2009 Dup	147.55	7.80	ND	139.75	1.54	<3.00	16.2	44.6	3.42	13.5	**431**	<500	**670**
	12/23/2009	147.55	7.70	ND	139.85	2.06	<3.00	20.2	83.3	<3.00	16.7	**778**	<500	**1,940**
	04/21/2010	147.55	8.51	ND	139.04	1.63	<3.00	9.32	7.54	<3.00	5.68	**323**	174	**569**
	4/21/2010 Dup	147.55	8.51	ND	139.04	1.52	<3.00	9.84	7.93	<3.00	5.92	**341**	235	**566**
	06/10/2010	147.55	8.25	ND	139.30	2.93	<3.00	19.5	53.3	4.14	16.9	**1,350**	**757**	**1,800**
	09/30/2010	147.55	9.55	ND	138.00	**<10.0**	<10.0	17.0	69.4	<10.0	24.1	**481**	**1,200**	**600**
	12/29/2010	147.55	8.02	ND	139.53	<5.00	<5.00	5.0	<15.00	<5.00	5.0	163	264	129
	03/31/2011	147.55	7.22	ND	140.33	<5.00	<5.00	5.0	<15.00	<5.00	5.0	<75	59.4	25.3
	06/28/2011	147.55	7.53	ND	140.02	<5.0	26.6	14.6	38.1	<5.0	7.3	**307**	442	**219**
	09/28/2011	147.55	7.97	ND	139.58	<5.0	<5.0	20.4	67.1	<5.0	15.0	**313**	**709**	**431**
	12/22/2011	147.55	7.77	ND	139.78	<5.0	<5.0	10.2	22.6	<5.0	8.9	**356**	534	**263**
	03/08/2012	147.55	7.66	ND	139.89	<5.0	<5.0	5.0	<15.0	<5	5.2	121	205	174
	06/20/2012	147.55	8.24	ND	139.31	<5.0	<5.0	15.5	36.6	<5.0	20.3	**542**	390	**916**
	09/10/2012	147.55	8.67	ND	138.88	<5.0	<5.0	24.3	57.7	<5.0	27.2	**447**	**1,100**	**1,350**
	12/12/2012	147.55	8.49	ND	139.06	<5.0	<5.0	6.6	<15.0	<5.0	8.0	**347**	167	**406**
	03/27/2013	147.55	13.16	ND	134.39	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	30.4	27.2
	06/19/2013	147.55	7.35	ND	140.20	<5.0	<5.0	8.1	18.8	<5.0	10.3	215	103	**336**
	12/16/2013	147.55	8.63	ND	138.92	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	34.8	36.4
	03/26/2014	147.55	7.43	ND	140.12	<5.0	<5.0	7.04	<15.0	<5.0	5.81	124	142	200
		Destroyed April 2014												
MW-2R (GW-1,2,3)	06/30/2014	NM	8.96	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	09/11/2014	NM	9.22	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	12/08/2014	NM	7.66	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/31/2015	NM	7.40	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/17/2015	NM	9.25	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/16/2015	NM	9.05	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/08/2016	NM	8.44	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/07/2016	NM	8.75	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/26/2016	NM	9.43	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/20/2016	NM	8.68	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/28/2017	NM	7.94	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/28/2017	NM	8.40	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	09/19/2017	NM	9.22	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	12/27/2017	NM	8.91	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	03/19/2018	NM	7.94	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/06/2018	NM	8.67	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/03/2018	NM	7.17	ND	NM	<1.0	<1.0	<1.0	1.8	<1.0	<5.0	<100	<100	<100

95-214880
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Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
MW-2D	11/20/2000	148.24	7.95	ND	140.29	**18.3**	245	407	2,830	**697**	**193**	**1,450**	**3,170**	**4,250**
(GW-1,3)	02/26/2001	148.24	8.04	ND	140.20	<1.0	<5.0	9	34.7	8.2	9.1	**380**	220	**220**
25-35'	07/16/2001	148.24	9.11	ND	139.13	<5.0	<5.0	<5.0	7.3	52.4	6.7	62.4	<50	68.3
	01/22/2002	148.24	8.98	ND	139.26	<5.0	<5.0	<5.0	9.5	<5.0	<5.0	189	<50	113
	05/07/2002	148.24	8.05	ND	140.19	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/02/2002	147.84	9.59	ND	138.25	<2.0	<2.0	<2.0	12.8	67	<3.0	<50	<50	<50
	11/18/2002	147.84	7.71	ND	140.13	<2.0	<2.0	2.1	4.9	<2.0	<3.0	139	<50	143
	05/10/2003	147.84	7.51	ND	140.33	<2.0	<2.0	<2.0	2	<2.0	<3.0	<50	<50	<50
	11/13/2003	147.84	8.66	ND	138.88	<2.0	<2.0	<2.0	<4.0	4.7	<3.0	<50	<50	<50
	05/18/2004	147.84	8.32	ND	139.52	<1.00	<3.0	<1.0	<6.0	3.3	<5.0	<100	<100	<100
	11/18/2004	147.84	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
MW-3	01/31/1997	148.02	8.38	ND	139.64	**122**	59	93	770	**960**	NA	NA	NA	NA
(GW-1,2,3)	10/22/1997	148.02	10.60	ND	137.42	**7**	<1.0	<1.0	7	**290**	NA	NA	NA	NA
5-15'	05/04/1998	148.02	8.18	ND	139.84	**140**	370	180	1,500	**1,000**	NA	NA	NA	NA
	07/30/1998	148.02	8.94	ND	139.08	**220**	110	16	73	**1,100**	NA	NA	NA	NA
	09/11/1998	148.02	9.64	ND	138.38	**80**	<1.0	17	<3	**450**	NA	NA	NA	NA
	10/26/1998	148.02	8.98	ND	139.04	**35**	<10	14	20	**640**	NA	NA	NA	NA
	11/13/1998	148.02	9.14	ND	138.88	**<100**	27	15	28	**2,400**	NA	NA	NA	NA
	12/17/1998	148.02	9.39	ND	138.63	4	<1.0	1	<3	**120**	NA	NA	NA	NA
	01/06/1999	148.02	8.79	ND	139.23	**<50**	41	32	250	**9,100**	NA	NA	NA	NA
	02/09/1999	148.02	8.12	ND	139.90	**60**	170	110	800	**11,000**	NA	NA	NA	NA
	03/29/1999	148.02	7.95	ND	140.07	**120**	340	70	330	**1,700**	NA	NA	NA	NA
	06/24/1999	148.02	9.25	ND	138.77	3.6	<5.0	<5.0	<15	**749**	<5	<100	130	**230**
	11/04/1999	148.02	8.65	ND	139.37	**270**	373	<25	142	**13,200**	<25	**<500**	<500	**580**
	01/03/2000	148.02	8.94	ND	139.08	**13.4**	<5.0	<5.0	<15	**2,620**	<5.0	<100	<100	160
	02/25/2000	148.02	8.18	ND	139.84	**620**	**1,900**	210	1,200	**42,000**	NS	NS	NS	NS
	04/14/2000	148.02	8.41	ND	139.61	**695**	**2,380**	372	1,929	**3,370**	0	**<1,000**	**3,100**	**3,300**
	08/21/2000	148.02	9.10	ND	138.92	**118**	8.5	104	34.1	**7,950**	0.0	<100	600	**870**
	11/20/2000	148.02	8.52	ND	139.50	**300**	168	70.5	316	**3,250**	0.0	<50	200	**645**
	02/26/2001	148.02	8.44	ND	139.58	**384**	926	410	1,763	**9,880**	0	**<500**	**2,800**	**2,500**
	07/16/2001	148.02	9.41	ND	138.61	**188**	<10	<10	<20	**7,010**	<10	<100	<100	117
	01/22/2002	148.02	9.40	ND	138.62	**105**	<10	97.4	106.1	**1,960**	0.0	<100	164	**566**
	05/07/2002	148.02	8.31	ND	139.71	**213**	746	372	1,560	**1,950**	78.1	**544**	**1,130**	**2,990**
	10/02/2002	147.60	9.93	ND	137.67	<2.0	<2.0	<2.0	<4.0	25.6	<3.0	<50	<50	<50
	05/10/2003	147.60	8.11	ND	139.49	**18.1**	249	318	963	**520**	61.8	**489**	<50	**1,860**
	11/13/2003	147.60	8.73	ND	138.87	<2.0	13.7	29	134	46.9	3.4	<50	<50	170
	05/18/2004	147.60	8.51	ND	139.09	<1.00	10.4	172	392	63	26.6	102	242	**979**
	11/19/2004	147.60	NG	NG	NA	<1.00	4.7	24.2	66.1	8.9	<5.0	<100	<100	<100
	06/20/2005	147.60	8.54	ND	139.06	< 1.00	< 3.00	3.9	18.9	17.5	10.2	<100	<100	<100
	12/16/2005	147.60	7.94	ND	139.66	<1.00	<3.00	13.0	18.24	23.4	6.60	199	281	**539**
	06/27/2006	147.60	7.55	ND	140.05	1.96	<3.00	87.8	171.7	**326**	38.7	**481**	**1,820**	**1,910**
	12/14/2006	147.60	8.63	ND	138.97	<1.00	<3.00	2.29	<6.00	<3.00	<5.00	<100	146	<50
	07/11/2007	147.60	9.06	ND	138.54	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.60	8.32	ND	139.28	<1.00	<3.00	6.94	<6.00	<3.00	<5.00	<100	<100	**339**
	06/20/2008	147.60	8.74	ND	138.86	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.60	8.20	ND	139.40	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	152
	12/23/2009	147.60	8.31	ND	139.29	3.41	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	125
	06/10/2010	147.60	8.93	ND	138.67	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/19/2013	147.60	8.11	ND	139.49	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75	<25	<25
	03/26/2014	147.60	8.21	ND	139.39	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75	<25	<25
	06/30/2014	147.60	9.09	ND	138.51	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	03/31/2015	147.60	7.70	ND	139.90	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	09/17/2015	147.60	9.40	ND	138.20	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/16/2015	147.60	9.03	ND	138.57	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/08/2016	147.60	8.55	ND	139.05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/07/2016	147.60	8.80	ND	138.80	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/26/2016	147.60	9.52	ND	138.08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/20/2016	147.60	8.74	ND	138.86	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/28/2017	147.60	8.04	ND	139.56	<1.0	19	12	96	<1.0	6.8	140	<100	**320**
	06/28/2017	147.60	8.42	ND	139.18	<1.0	1.4	9.3	44	<1.0	6.2	<100	210	160
	09/19/2017	147.60	9.11	ND	138.49	<1.0	<1.0	14	49.7	1.5	10	<100	<100	**290**
	12/27/2017	147.60	8.87	ND	138.73	<1.0	<1.0	2.6	2.3	<1.0	<5.0	<100	120	<100
	03/19/2018	147.60	7.44	ND	140.16	<1.0	<1.0	1.5	<3.0	<1.0	<5.0	<100	<100	140
	06/06/2018	147.60	8.71	ND	138.89	<1.0	<1.0	3.4	<3.0	<1.0	<5.0	<100	220	190
	12/03/2018	147.60	7.18	ND	140.42	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	170	140

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Table 1
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Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
MW-3 (Continued)	03/25/2019	147.60	7.77	ND	139.83	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/24/2019	147.60	8.36	ND	139.24	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	170
	10/17/2019	147.60	8.32	ND	139.28	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	190
	12/18/2019	147.60	7.62	ND	139.98	<1.0	<1.0	<1.0	<3.0	<1.0	8.4	<100	<100	**240**
	05/11/2020	147.60	8.28	ND	139.32	<1.0	<1.0	<1.0	<3.0	<1.0	9.0	<100	<100	**300**
	09/24/2020	147.60	9.51	ND	138.09	<1.0	<1.0	<1.0	<3.0	<1.0	8.0	<100	<100	200
	12/21/2020	147.60	8.53	ND	139.07	<1.0	<1.0	<1.0	<3.0	<1.0	5.3	<100	<100	200
	03/22/2021	147.60	8.29	ND	139.31	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/16/2021	147.60	8.54	ND	139.06	<1.0	<1.0	<1.0	<3.0	<1.0	8.7	<100	120	**210**
	09/17/2021	147.60	8.37	ND	139.23	<1.0	<1.0	<1.0	<3.0	<1.0	10	<100	<100	**230**
	12/17/2021	147.60	8.49	ND	139.11	<2.0	<2.0	<2.0	<6.0	<2.0	<10	<200	230	**210**
	03/16/2022	147.60	8.02	ND	139.58	<1.0	<1.0	<1.0	<3.0	<1.0	5.6	<100	150	120
	07/11/2022	147.60	9.10	ND	138.50	<2.0	<2.0	<2.0	<6.0	<2.0	<10	<200	<200	<200
	09/27/2022	147.60	9.13	ND	138.47	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	147.60	8.06	ND	139.54	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	147.60	8.02	ND	139.58	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
MW-4 (GW-1,2,3) *5-15'*	04/03/1997	147.95	7.46	ND	140.49	***4,720***	**9,150**	402	2,533	**34,400**	NA	NA	NA	NA
	07/21/1997	147.95	9.36	ND	138.59	***2,700***	**18,000**	600	4,600	**24,000**	NA	NA	NA	NA
	10/22/1997	147.95	10.40	ND	137.55	***3,400***	**16,000**	**700**	5,900	**25,000**	NA	NA	NA	NA
	05/04/1998	147.95	8.00	ND	139.95	***2,900***	**17,000**	**890**	7,400	**3,900**	NA	NA	NA	NA
	07/30/1998	147.95	8.59	ND	139.36	***2,600***	**17,000**	**990**	7,700	**3,200**	NA	NA	NA	NA
	09/11/1998	147.95	9.00	ND	138.95	**370**	**9,000**	**710**	4,400	**3,000**	NA	NA	NA	NA
	10/26/1998	147.95	8.79	ND	139.16	**320**	**3,900**	250	1,700	**3,700**	NA	NA	NA	NA
	11/13/1998	147.95	8.97	ND	138.98	**200**	**3,300**	250	1,600	**970**	NA	NA	NA	NA
	12/17/1998	147.95	9.18	ND	138.77	**250**	**5,500**	430	2,800	**1,600**	NA	NA	NA	NA
	01/06/1999	147.95	8.65	ND	139.30	**210**	**5,200**	590	3,600	**2,700**	NA	NA	NA	NA
	02/09/1999	147.95	7.90	ND	140.05	**200**	**4,600**	530	3,700	**4,000**	NA	NA	NA	NA
	03/29/1999	147.95	7.65	ND	140.30	**90**	**2,100**	500	2,800	**3,400**	NA	NA	NA	NA
	06/24/1999	147.95	9.63	ND	138.32	**115**	**3,910**	**1,210**	8,300	**11,800**	**280**	**<2,500**	***8,400***	***8,600***
	11/04/1999	147.95	8.48	ND	139.47	**113**	550	150	974	**5,220**	74	**<1,000**	**1,000**	**2,400**
	01/03/2000	147.95	8.78	ND	139.17	**491**	**2,410**	580	3,510	**3,520**	**177**	**1,000**	**4,400**	**6,400**
	02/16/2000	147.95	8.28	ND	139.67	**243**	854	281	1,548	**2,340**	73	**<500**	**2,400**	**3,170**
	04/14/2000	147.95	7.92	ND	140.03	**632**	**3,550**	**890**	5,580	**4,140**	**210**	**<2,500**	***7,700***	***7,000***
	08/21/2000	147.95	8.82	ND	139.13	**932**	**5,100**	400	2,550	**37,100**	**<250**	***<5,000***	**<5,000**	***9,500***
	11/20/2000	147.95	8.25	ND	139.70	**537**	**1,290**	343	527	**12,300**	86	<100	**531**	**1,570**
	02/26/2001	147.95	8.67	ND	139.28	**455**	**3,190**	**942**	5,490	**5,000**	**245**	**<1,000**	***8,300***	***8,500***
	07/16/2001	147.95	9.22	ND	138.73	**1,940**	**4,200**	600	3,380	***70,500***	**181**	**<500**	***5,480***	***9,190***
	09/07/2001	147.95	9.82	ND	138.13	**366**	432	432	1,672	**42,000**	128	<100	**1,530**	**2,640**
	01/22/2002	147.95	9.28	ND	138.67	**555**	**3,240**	**887**	3,150	**6,130**	**<250**	**<2,500**	**<2,500**	**3,750**
	05/07/2002	147.95	8.14	ND	139.81	**199**	**1,740**	291	1,660	**2,350**	52.9	**727**	**850**	**2,460**
	10/02/2002	147.67	9.82	ND	137.85	**140**	**1,340**	613	2,466	**691**	**151**	**619**	214	**2,570**
	05/10/2003	147.67	7.81	ND	139.86	**24**	705	187	851	**425**	45.6	**1,100**	<50	**1,450**
	11/12/2003	147.67	8.85	ND	138.82	**6**	792	292	1,299	**132**	127	**612**	103	**3,010**
	02/03/2004	147.67	8.86	ND	138.81	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/2004	147.67	8.38	ND	139.29	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/18/2004	147.67	8.36	ND	139.31	1.5	321	224	1,133	31.3	47	**427**	**1,650**	**1,850**
	11/19/2004	147.67	NG	NG	NA	1	142	490	2,566	11.4	**186**	**762**	**3,560**	**4,380**
	11/19/2004 Dup	147.67	NG	NG	NA	<1.0	126	500	2,646	9.8	**176**	**648**	**3,370**	**4,480**
	06/20/2005	147.67	7.7	ND	139.97	1.1	24.8	338	2,908	**123**	**206**	**931**	**< 2,000**	***7,300***
	12/16/2005	147.67	Water runoff puddling over the well											
	06/27/2006	147.67	7.33	ND	140.34	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/14/2006	147.67	8.29	ND	139.38	<1.00	<3.00	8.29	41.3	<3.00	<5.00	<100	613	**282**
	07/11/2007	147.67	8.97	ND	138.70	<1.00	<3.00	43.2	153.8	<3.00	25.4	163	**1,680**	**1,840**
	01/08/2008	147.67	8.10	ND	139.57	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.67	8.61	ND	139.06	<1.00	<3.00	16.6	16.02	<3.00	6.35	134	197	**561**
	01/14/2009	147.67	8.08	ND	139.59	<1.00	<3.00	7.15	7.13	<3.00	<5.00	134	275	**731**
	06/22/2009	147.67	6.35	ND	141.32	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	**282**
	12/23/2009	147.67	8.11	ND	139.56	3.23	<3.00	1.92	<6.00	<3.00	<5.00	183	184	**562**
	06/10/2010	147.67	8.74	ND	138.93	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	109	121	**256**
	06/28/2011	147.67	8.07	ND	139.60	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	09/28/2011	147.67	8.45	ND	139.22	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	66.6	<25.0
	12/22/2011	147.67	8.01	ND	139.66	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	03/08/2012	147.67	8.15	ND	139.52	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	06/20/2012	147.67	8.72	ND	138.95	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	49.1	60.4
	03/27/2013	147.67	7.70	ND	139.97	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	28	38.9
	12/16/2013	147.67	9.08	ND	138.59	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0

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Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
MW-4 (Continued)	06/30/2014	147.67	8.95	ND	138.72	1.6	<1.0	<1.0	<2.0	16	<5.0	<100	<100	<100
	12/08/2014	147.67	7.61	ND	140.06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/17/2015	147.67	9.26	ND	138.41	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/16/2015	147.67	8.95	ND	138.72	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/08/2016	147.67	8.36	ND	139.31	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/26/2016	147.67	9.40	ND	138.27	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/20/2016	147.67	8.41	ND	139.26	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/28/2017	147.67	2.39	ND	145.28	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/28/2017	147.67	7.22	ND	140.45	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	12/27/2017	147.67	8.80	ND	138.87	<1.0	1.2	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	03/19/2018	147.67	7.88	ND	139.79	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/06/2018	147.67	8.73	ND	138.94	<1.0	1.2	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/03/2018	147.67	7.09	ND	140.58	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
MW-5D (GW-1,3) *26-31'*	10/02/2002	147.44	9.47	ND	137.97	**82.7**	740	612	4,280	**1,410**	**290**	**1,260**	**895**	**3,950**
	11/18/2002	147.44	7.91	ND	139.53	**26.4**	4.1	268	659	**378**	**184**	**1,930**	**1,080**	**2,880**
	05/10/2003	147.44	7.24	ND	140.20	**8.4**	2.3	76.5	140.8	**131**	51.8	**699**	<50	**728**
	11/13/2003	147.44	8.56	ND	138.88	<2.0	<2.0	28.6	7.8	**172**	8.5	117	<50	**235**
	05/18/2004	147.44	7.99	ND	139.45	<1.00	<3.0	9.1	<6.0	18	<5.0	<100	<100	<100
	11/18/2004	147.44	NG	NG	NA	<1.00	<3.0	1.8	<6.0	11	<5.0	<100	<100	<100
	06/20/2005	147.44	7.92	ND	139.52	<1.00	<3.0	3.7	<6.0	6.0	<5.0	<100	<100	<100
	12/16/2005	147.44	7.38	ND	140.06	<1.00	<3.00	1.88	<4.00	3.84	<5.00	<100	<100	<100
	06/27/2006	147.44	6.90	ND	140.54	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/11/2007	147.44	9.05	ND	138.39	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.44	7.72	ND	139.72	<1.00	<3.00	23.3	72.6	<3.00	7.71	<100	<100	**557**
	06/20/2008	147.44	8.25	ND	139.19	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/23/2008	147.44	7.52	ND	NA	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.44	7.58	ND	139.86	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	147.44	7.34	ND	140.10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	147.44	7.20	ND	140.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
MW-5DD (GW-1,3) *68-73'*	05/10/2003	Unknown	7.18	ND	NA	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	11/13/2003	Unknown	8.11	ND	NA	<2.0	2	<2.0	17.4	<2.0	<3.0	<50	<50	66.5
	05/18/2004	Unknown	7.57	ND	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	11/18/2004	Unknown	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
OW-A (GW-1,3) *1-14'*	06/22/1998	144.74	4.84	ND	139.90	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	07/30/1998	144.74	5.67	ND	139.07	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	09/11/1998	144.74	6.57	ND	138.17	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	144.74	5.72	ND	139.02	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	144.74	5.85	ND	138.89	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	144.74	6.12	ND	141.62	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	144.74	5.57	ND	139.17	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	144.74	5.50	ND	139.24	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	03/29/1999	144.74	4.82	ND	139.92	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA
	06/24/1999	144.74	5.89	ND	138.85	<1.0	<5.0	<5.0	<15	<5.0	<5	<100	<100	<100
	11/20/2000	144.74	5.26	ND	139.48	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/02/2002	144.34	6.88	ND	137.46	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	11/13/2003	144.34	5.32	ND	139.02	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
OW-B (GW-1,3) *3.5-1 6.5'*	01/31/1997	148.52	9.54	ND	138.98	**67**	626	**860**	6,970	**15,100**	NA	NA	NA	NA
	04/03/1997	148.52	10.04	ND	138.48	**128**	297	512	3,880	**9,930**	NA	NA	NA	NA
	07/21/1997	148.52	10.72	ND	137.80	**250**	700	560	4,200	**14,000**	NA	NA	NA	NA
	10/22/1997	148.52	11.53	ND	136.99	**400**	400	500	3,100	**26,000**	NA	NA	NA	NA
	05/04/1998	148.52	9.26	ND	139.26	**90**	100	140	1,200	**5,900**	NA	NA	NA	NA
	07/30/1998	148.52	10.25	ND	138.27	**<500**	350	480	2,400	**8,800**	NA	NA	NA	NA
	09/11/1998	148.52	11.04	ND	137.48	**290**	490	500	3,200	**11,000**	NA	NA	NA	NA
	10/26/1998	148.52	10.35	ND	138.17	**550**	910	610	3,200	**12,000**	NA	NA	NA	NA
	11/13/1998	148.52	10.40	ND	138.12	**500**	**1,400**	670	4,500	**15,000**	NA	NA	NA	NA
	12/17/1998	148.52	10.71	ND	137.79	**320**	850	590	4,400	**6,500**	NA	NA	NA	NA
	01/06/1999	148.52	10.09	ND	138.43	**<500**	380	450	3,500	**4,000**	NA	NA	NA	NA
	02/09/1999	148.52	9.63	ND	138.89	**100**	540	510	4,300	**7,000**	NA	NA	NA	NA
	03/29/1999	148.52	9.52	ND	139.00	**230**	400	450	3,500	**9,000**	NA	NA	NA	NA
	06/24/1999	148.52	10.72	ND	137.80	**457**	780	540	3,920	**8,680**	**<250**	***<5,000***	**<5,000**	**5,100**
	11/04/1999	148.52	9.94	ND	138.58	**179**	750	440	2,830	**10,500**	**170**	**<2,500**	**<2,500**	***7,300***
	01/03/2000	148.52	10.20	ND	138.32	**265**	542	460	2,890	**20,500**	**217**	**<1,000**	**4,100**	***7,100***

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-B (Continued)	02/16/2000	148.52	9.76	ND	138.76	**433**	890	463	3,020	**22,200**	**202**	**<1,000**	***5,400***	***7,000***
	02/25/2000	148.52	9.37	ND	139.15	**450**	860	450	3,300	**30,000**	NS	NS	NS	NS
	04/14/2000	148.52	6.73	ND	141.79	**409**	880	560	4,180	**13,100**	**250**	**<2,500**	***6,200***	**6,800**
	08/21/2000	148.52	10.22	ND	138.30	**262**	**1,230**	655	4,330	**9,270**	**254**	**<1,000**	***5,100***	***7,100***
	11/20/2000	148.52	9.45	ND	139.07	**13.2**	28.2	12.2	115.2	**2,250**	<5	<50	75.5	**252**
	02/26/2001	148.52	9.38	ND	139.14	<1.0	<5.0	<5.0	<15	41	<5	<100	<100	<100
	07/16/2001	148.52	10.64	ND	137.88	**214**	108	253	431.2	**11,400**	81.4	<100	**842**	**1,380**
	09/07/2001	148.52	11.26	ND	137.26	**1940**	**5,250**	**953**	8,460	**19,800**	**199**	<250	**4570**	***8,070***
	01/22/2002	148.52	11.68	ND	136.84	**97.4**	<50	90.6	335	**5,070**	<50	<500	<500	**1,520**
	05/07/2002	148.52	9.43	ND	139.09	**185**	75.5	291	1,108	**7,450**	121	**345**	**1,060**	**4,030**
	10/02/2002	148.12	10.92	ND	137.20	<2.0	<2.0	<2.0	<4.0	**76**	<3.0	<50	<50	<50
	05/10/2003	148.12	9.28	ND	138.84	<2.0	<2.0	2.4	2.9	24	<3.0	<50	<50	<50
	11/13/2003	148.12	10.03	ND	138.6	<2.0	<2.0	<2.0	<2.0	7	<3.0	<50	<50	<50
	05/18/2004	148.12	9.75	ND	138.37	**22.7**	<3.0	128	44.1	**2,410**	<5.0	127	248	**1,120**
	11/17/2004	148.12	NG	NG	NA	**6.4**	12.2	175	386.8	**154**	81.7	**504**	**2,090**	**2,440**
	06/02/2005	148.12	10.03	ND	138.09	<1.00	<3.0	<1.0	<6.0	< 3.0	<5.0	<100	<100	<100
	12/16/2005	148.12	9.23	ND	138.89	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	06/27/2006	148.12	8.71	ND	139.41	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/14/2006	148.12	9.84	ND	138.28	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	148.12	9.98	ND	138.14	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10/17/2007	148.12	10.56	ND	137.56	<1.00	<3.00	<1.00	<6.00	3.91	<5.00	<100	199	95.9
	01/08/2008	148.12	9.30	ND	138.82	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	78.5
	03/21/2008	148.12	8.52	ND	139.60	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	148.12	9.74	ND	138.38	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	118	<500
	09/25/2008	148.12	9.81	ND	138.31	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	76.2
	12/18/2008	148.12	8.90	ND	139.22	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	03/10/2009	148.12	8.75	ND	139.37	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	124	<100
	06/22/2009	148.12	9.16	ND	138.96	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	153	<100	**259**
	09/17/2009	148.12	9.53	ND	138.59	1.14	<3.00	2.51	4.04	<3.00	<5.00	164	126	**248**
	12/23/2009	148.12	9.30	ND	138.82	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	04/21/2010	148.12	9.31	ND	138.81	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	57.7
	06/11/2010	148.12	9.83	ND	138.29	1.40	<3.00	<1.00	<6.00	<3.00	<5.00	151	109	191
	06/28/2011	148.12	9.56	ND	138.56	<5.0	<5.0	<5.0	<10.0	<5.0	10.5	160	152	81.7
	12/12/2012	148.12	9.98	ND	138.14	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	184	42.8	73.9
	03/26/2014	148.12	9.25	ND	138.87	<5.0	<5.0	<5.0	<10.0	<5.0	8.7	127	99.3	76.3
	09/11/2014	148.12	10.44	ND	137.68	<1.0	<1.0	1.6	<2.0	1.5	<5.0	190	<100	130
OW-BD (GW-1,3) *20-25'*	11/20/2000	147.93	9.38	ND	138.55	**124**	12.6	151	201.6	**8,170**	38.4	<50	238	**782**
	02/26/2001	147.93	9.06	ND	138.87	**84**	<5.0	108	128	**4,520**	18.7	<100	380	**420**
	01/22/2002	147.93	10.20	ND	137.73	<5.0	<5.0	<5.0	<10	**646**	10	<50	<50	<50
	05/07/2002	147.93	8.96	ND	138.97	<5.0	<5.0	<5.0	<10	**870**	<5.0	<50	<50	<50
	10/02/2002	147.65	10.44	ND	137.21	**29.1**	<2.0	72.1	62.7	**1,480**	<3.0	<50	<50	145
	05/10/2003	147.65	8.83	ND	138.82	**16.4**	3.2	134	102.6	**967**	34.2	<50	<50	**710**
	11/13/2003	147.65	9.55	ND	138.10	<2.0	<2.0	4.1	4.7	**254**	<3.0	<50	<50	64
	05/18/2004	147.65	9.27	ND	138.38	1.3	<3.0	2.1	<6.0	**113**	<5.0	<100	<100	<100
	11/17/2004	147.65	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	3.5	<5.0	<100	<100	<100
	06/02/2005	147.65	9.58	ND	138.07	<1.00	<3.0	<1.0	<6.0	< 3.0	<5.0	<100	<100	<100
	12/16/2005	147.65	8.78	ND	138.87	<1.00	<3.00	<1.0	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	147.65	8.21	ND	139.44	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/14/2006	147.65	9.40	ND	138.25	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	147.65	9.48	ND	138.17	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.65	8.82	ND	138.83	<1.00	<3.00	<1.00	<6.00	4.29	<5.00	<100	<100	<100
	06/20/2008	147.65	9.28	ND	138.37	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.65	8.41	ND	139.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.65	8.67	ND	138.98	<1.00	<3.00	<1.00	<6.00	18	<5.00	<100	<100	<100
	12/23/2009	147.65	8.80	ND	138.85	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	147.65	9.40	ND	138.25	<1.00	<3.00	<1.00	<6.00	20.2	<5.00	<100	<100	<100

95-214880
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Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-C	05/04/1998	141.22	2.65	ND	138.57	<1.0	<1.0	<1.0	<3	**84**	NA	NA	NA	NA
(GW-1,3)	11/13/1998	141.22	3.04	ND	138.18	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA
0.3-12'	12/17/1998	141.22	3.31	ND	137.91	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	01/06/1999	141.22	2.95	ND	138.27	<1.0	<1.0	<1.0	<3	8	NA	NA	NA	NA
	02/09/1999	141.22	5.85	ND	135.37	<1.0	<1.0	<1.0	<3	<1	NA	NA	NA	NA
	03/29/1999	141.22	2.55	ND	138.67	<1.0	<1.0	<1.0	<3	43	NA	NA	NA	NA
	06/24/1999	141.22	3.28	ND	137.94	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/04/1999	141.22	2.90	ND	138.32	<1.0	<5.0	<5.0	<15	24.6	<5.0	<100	<100	<100
	12/14/2006	140.82	2.5	ND	138.32	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	140.82	2.83	ND	137.99	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	140.82	2.28	ND	138.54	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	140.82	2.70	ND	138.12	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	140.82	2.25	ND	138.57	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	140.82	2.21	ND	138.61	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	140.82	3.02	ND	137.80	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-D	11/04/1999	141.36	3.49	ND	139.25	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
(GW-1,3)	11/20/2000	141.36	3.56	ND	137.80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50
1-9'														
OW-ED	11/20/2000	148.60	9.73	ND	138.87	**6.8**	<5.0	<5.0	<10	**326**	<5.0	<50	<50	<50
(GW-1,3)	02/26/2001	148.60	9.56	ND	139.04	**8.1**	<5.0	<5.0	<15	**87.4**	<5.0	<100	<100	<100
25-35'	10/02/2002	148.33	11.04	ND	137.29	3.5	<2.0	<2.0	<4.0	**222**	<3.0	<50	<50	<50
	11/18/2002	148.33	9.13	ND	139.20	3.5	<2.0	<2.0	<4.0	**213**	<3.0	<50	<50	<50
	05/10/2003	148.33	9.23	ND	139.10	<2.0	<2.0	<2.0	<4.0	22.2	<3.0	<50	<50	<50
	11/13/2003	148.33	10.04	ND	138.39	3.4	<1.0	<1.0	<1.0	**186**	NS	NS	NS	NS
	05/18/2004	148.33	9.77	ND	138.56	3.1	<3.0	<1.0	<6.0	45.4	<5.0	<100	<100	<100
	May 18 04 Dup	148.33	9.77	ND	138.56	3.6	<3.0	<1.0	<6.0	36.2	<5.0	<100	<100	<100
	11/17/2004	148.33	NG	NG	NA	4.4	<3.0	<1.0	<6.0	**120**	<5.0	<100	<100	<100
	06/02/2005	148.33	9.7	ND	138.63	1.9	<3.0	<1.0	<6.0	**80.4**	<5.0	<100	<100	<100
	12/15/2005	148.33	9.02	ND	139.31	<1.00	<3.00	<1.00	<4.00	**105**	<5.00	<100	<100	<100
	06/27/2006	148.33	8.60	ND	139.73	<1.00	<3.00	<1.00	<4.00	**111**	<5.00	<100	<100	<100
	12/14/2006	148.33	9.71	ND	138.62	<1.00	<3.00	<1.00	<6.00	**117**	<5.00	<100	<100	<100
	07/10/2007	148.33	10.03	ND	138.30	<1.00	<3.00	<1.00	<6.00	61.5	<5.00	<100	<100	<100
	01/08/2008	148.33	9.35	ND	138.98	<1.00	<3.00	<1.00	<6.00	55.2	<5.00	<100	<100	<100
	06/20/2008	148.33	9.88	ND	138.45	<1.00	<3.00	<1.00	<4.00	**109**	<5.00	<100	<100	<100
	12/18/2008	148.33	8.89	ND	139.44	<1.00	<3.00	<1.00	<6.00	**113**	<5.00	<100	<100	<100
	06/22/2009	148.33	9.18	ND	139.15	<1.00	<3.00	<1.00	<6.00	**141**	<5.00	<100	<100	<100
	12/23/2009	148.33	9.40	ND	138.93	<1.00	<3.00	<1.00	<6.00	**164**	<5.00	<100	<100	<100
	06/11/2010	148.33	10.00	ND	138.33	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/28/2011	148.33	10.17	ND	138.16	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	09/28/2011	148.33	09.71	ND	138.62	<5.0	<5.0	<5.0	<10.0	34.2	<5.0	<75.0	47.6	<25.0
	12/22/2011	148.33	09.11	ND	139.22	<5.0	<5.0	<5.0	<10.0	5	<5.0	<75.0	<25.0	<25.0
	09/10/2012	148.33	10.33	ND	138.00	<5.0	6.4	17.9	<10.0	5	13.3	162	190	188
	12/12/2012	148.33	10.05	ND	138.28	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	26.6
	03/27/2013	148.33	9.02	ND	139.31	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	06/19/2013	148.33	8.19	ND	140.14	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	12/16/2013	148.33	9.27	ND	139.06	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	03/31/2015	148.33	8.80	ND	139.53	<1.0	<1.0	<1.0	<3.0	16	<5.0	<100	<100	<100
	09/17/2015	148.33	24.50	ND	123.83	<1.0	<1.0	<1.0	<3.0	**90**	<5.0	<100	<100	<100
	12/16/2015	148.33	10.07	ND	138.26	<1.0	<1.0	<1.0	<3.0	28	<5.0	<100	<100	<100
	03/08/2016	148.33	9.61	ND	138.72	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	06/07/2016	148.33	9.83	ND	138.50	<1.0	<1.0	<1.0	<3.0	7.9	<5.0	<100	<100	<100
	09/26/2016	148.33	10.65	ND	137.68	<1.0	<1.0	<1.0	<3.0	7.9	<5.0	<100	<100	<100
	12/20/2016	148.33	9.76	ND	138.57	<1.0	<1.0	<1.0	<3.0	4.8	<5.0	<100	<100	<100
	03/28/2017	148.33	9.14	ND	139.19	<1.0	<1.0	<1.0	<2.0	5.5	<5.0	<100	<100	<100
	06/28/2017	148.33	9.60	ND	138.73	<1.0	<1.0	<1.0	<2.0	29	<5.0	<100	<100	<100
	09/19/2017	148.33	10.25	ND	138.08	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	12/27/2017	148.33	9.95	ND	138.38	<1.0	<1.0	<1.0	<2.0	2.8	<5.0	<100	<100	<100
	03/19/2018	148.33	9.22	ND	139.11	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	06/06/2018	148.33	9.79	ND	138.54	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/03/2018	148.33	8.44	ND	139.89	<1.0	<1.0	<1.0	<3.0	48	<5.0	<100	<100	<100
	03/25/2019	148.33	9.01	ND	139.32	<1.0	<1.0	<1.0	<3.0	10	<5.0	<100	<100	<100
	06/24/2019	148.33	9.44	ND	138.89	<1.0	<1.0	<1.0	<3.0	6.1	<5.0	<100	<100	<100
	10/17/2019	148.33	9.82	ND	138.51	<1.0	<1.0	<1.0	<3.0	30	<5.0	<100	<100	<100
	12/18/2019	148.33	8.83	ND	139.50	<1.0	<1.0	<1.0	<3.0	6.2	<5.0	<100	<100	<100

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-ED (Continued)	05/11/2020	148.33	9.43	ND	138.90	<1.0	<1.0	<1.0	<3.0	5.8	<5.0	<100	<100	<100
	09/24/2020	148.33	10.51	ND	137.82	<1.0	<1.0	<1.0	<3.0	11	<5.0	<100	<100	<100
	12/21/2020	148.33	9.66	ND	138.67	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/22/2021	148.33	9.38	ND	138.95	<1.0	<1.0	<1.0	<3.0	14	<5.0	<100	<100	<100
	06/16/2021	148.33	9.92	ND	138.41	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/17/2021	148.33	9.59	ND	138.74	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<100	<100	<100
	12/17/2021	148.33	9.75	ND	138.58	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/16/2022	148.33	9.25	ND	139.08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	07/11/2022	148.33	10.34	ND	137.99	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/27/2022	148.33	10.24	ND	138.09	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	148.33	9.18	ND	139.15	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	148.33	8.55	ND	139.78	<1.0	<1.0	<1.0	<3.0	4.5	<5.0	<100	<100	<100
OW-F (GW-1,3) *5-15'* Note: Well is confirmed to be obstructed	07/30/1998	147.08	8.07	ND	139.01	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	09/11/1998	147.08	8.90	ND	138.18	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	147.08	8.08	ND	139.00	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	147.08	8.25	ND	138.83	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	147.08	8.56	ND	138.52	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	147.08	7.92	ND	139.16	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	147.08	7.05	ND	140.03	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	03/29/1999	147.08	6.85	ND	140.23	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	06/24/1999	147.08	8.53	ND	138.55	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
OW-G (GW-1,3) *5-15'*	07/30/1998	147.57	8.91	ND	138.66	<5	<1.0	<1.0	<3	5	NA	NA	NA	NA
	09/11/1998	147.57	9.60	ND	137.97	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	147.57	8.84	ND	138.73	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	147.57	8.96	ND	138.61	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA
	12/17/1998	147.57	9.23	ND	138.34	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	147.57	8.62	ND	138.95	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	147.57	8.00	ND	139.57	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	03/29/1999	147.57	7.85	ND	139.72	<1.0	<1.0	<1.0	9	10	NA	NA	NA	NA
	06/24/1999	147.57	9.30	ND	138.27	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/04/1999	147.57	8.47	ND	139.10	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/03/2000	147.57	8.75	ND	138.82	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	04/14/2000	147.57	8.32	ND	139.25	<1.0	<5.0	<5.0	<15	6.9	<5.0	<100	<100	<100
	10/02/2002	147.19	9.71	ND	137.48	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	05/10/2003	147.19	7.42	ND	139.77	<1.0	3	1.5	12.5	23.2	NS	NS	NS	NS
	05/18/2004	147.19	8.35	ND	138.84	<1.00	7.1	5	17.1	**85.2**	<5.0	<100	<100	<100
	11/19/2004	147.19	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	147.19	8.26	ND	138.93	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	147.19	6.49	ND	140.70	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	147.19	7.00	ND	140.19	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/14/2006	147.19	8.34	ND	138.85	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/11/2007	147.19	8.78	ND	138.41	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/08/2008	147.19	8.07	ND	139.12	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.19	8.51	ND	138.68	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	147.19	7.92	ND	139.27	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.19	7.80	ND	139.39	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	147.19	8.00	ND	139.19	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	147.19	8.70	ND	138.49	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	09/30/2010	147.19	9.78	ND	137.41	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	12/29/2010	147.19	8.93	ND	138.26	<5.00	<5.00	<5.00	<15.00	<5.00	<5.00	<75	<25	<25
	03/31/2011	147.19	7.58	ND	139.61	<5.00	<5.00	<5.00	<15.00	<5.00	<5.00	<75	<25	<25
	06/28/2011	147.19	7.81	ND	139.38	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-H (GW-1,3) *4-16'*	05/20/1998	147.55	NG	ND	NG	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	07/30/1998	147.55	9.34	ND	138.21	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	09/11/1998	147.55	10.00	ND	137.55	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	147.55	9.26	ND	138.29	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	147.55	9.31	ND	138.24	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	147.55	9.59	ND	137.96	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	01/06/1999	147.55	8.94	ND	138.61	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	02/09/1999	147.55	8.56	ND	138.99	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	03/29/1999	147.55	8.40	ND	139.15	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	06/24/1999	147.55	9.74	ND	137.81	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	10/02/2002	147.25	10.02	ND	137.23	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	05/18/2004	147.25	9.03	ND	138.22	<1.00	<3.0	<1.0	<6.0	3.5	<5.0	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 1 Summary of Groundwater Data - VPH												
Well No. (GW Class) *Screen Interval (ft.)*	**Sampling Date**	**Top of Casing Elevation** (ft)	**Depth to Water** (ft)	**Depth to LNAPL** (ft)	**Ground Water Elevation** (ft)	**Benzene** (µg/L)	**Toluene** (µg/L)	**Ethyl-benzene** (µg/L)	**Total Xylenes** (µg/L)	**MTBE** (µg/L)	**Naph-thalene** (µg/L)	**C5-C8 Aliphatics** (µg/L)	**C9-C12 Aliphatics** (µg/L)	**C9-C10 Aromatics** (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-H (Continued)	11/19/2004	147.25	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/02/2005	147.25	7.80	ND	139.45	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	147.25	7.81	ND	139.44	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/27/2006	147.25	7.68	ND	139.57	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	147.25	8.68	ND	138.57	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	147.25	9.10	ND	138.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/07/2008	147.25	8.39	ND	138.86	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/20/2008	147.25	8.82	ND	138.43	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.25	7.94	ND	139.31	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/22/2009	147.25	8.28	ND	138.97	<1.00	<3.00	<1.00	<6.00	4.0	<5.00	<100	<100	<100
	12/23/2009	147.25	8.47	ND	138.78	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	147.25	9.11	ND	138.14	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
OW-I (GW-1,3) *Total depth = 12.5'*	05/27/1998	146.61	NG	ND	NG	<1.0	<1.0	<1.0	<3.0	**200**	NA	NA	NA	NA
	07/30/1998	146.61	8.18	ND	138.43	**24**	<1.0	<1.0	<3.0	**3,200**	NA	NA	NA	NA
	09/11/1998	146.61	8.81	ND	137.80	<1.0	<1.0	3	<3.0	**2,800**	NA	NA	NA	NA
	10/26/1998	146.61	8.09	ND	138.52	**<20**	<1.0	<1.0	<3.0	**2,100**	NA	NA	NA	NA
	11/13/1998	146.61	8.19	ND	138.42	**<20**	<1.0	<1.0	<3.0	**1,200**	NA	NA	NA	NA
	12/17/1998	146.61	8.41	ND	138.20	<1.0	<1.0	<1.0	<3.0	**780**	NA	NA	NA	NA
	01/06/1999	146.61	7.74	ND	138.87	**<10**	<1.0	<1.0	<3.0	**670**	NA	NA	NA	NA
	02/09/1999	146.61	7.40	ND	139.21	<1.0	<1.0	<1.0	<3.0	**360**	NA	NA	NA	NA
	03/29/1999	146.61	7.13	ND	139.48	**13**	<1.0	2	<3.0	**1,400**	NA	NA	NA	NA
	04/26/1999	146.61	7.74	ND	138.87	**8.8**	<5.0	<5.0	<5.0	**1,100**	<5	<50	<50	<50
	05/27/1999	146.61	7.84	ND	138.77	**20**	<1	26	<5.0	**1,000**	NA	NA	NA	NA
	06/24/1999	146.61	8.62	ND	137.99	**10.2**	<5.0	28.1	<15	**807**	<5	<100	<100	<100
	07/20/1999	146.61	8.81	ND	137.80	<5.0	<1	5	<3.0	**530**	NA	NA	NA	NA
	11/04/1999	146.61	7.70	ND	138.91	<1.0	<5.0	<5.0	<15	**104**	<5.0	<100	<100	<100
	01/03/2000	146.61	8.03	ND	138.58	<1.0	<5.0	<5.0	<15	61.4	<5.0	<100	<100	<100
	02/16/2000	146.61	7.43	ND	139.18	<1.0	<5.0	<5.0	<15	61.3	<5.0	<100	<100	<100
	02/25/2000	146.61	6.87	ND	139.74	<1.0	<1.0	<1.0	<3.0	**100**	NS	NS	NS	NS
	04/14/2000	146.61	7.73	ND	138.88	<1.0	<5.0	<5.0	<15	**96**	<5.0	<100	<100	<100
	08/21/2000	146.61	8.21	ND	138.40	<1.0	<5.0	<5.0	<15	28.5	<5.0	<100	<100	<100
	11/20/2000	146.61	7.65	ND	138.96	<1.0	<5.0	<5.0	<10	**244**	<5.0	<50	<50	<50
	02/26/2001	146.61	7.68	ND	138.93	<1.0	<5.0	<5.0	<15	**510**	<5.0	<100	<100	<100
	07/16/2001	146.61	8.61	ND	138.00	<5.0	<5.0	<5.0	<10	**873**	<5.0	<50	<50	<50
	01/22/2002	146.61	8.48	ND	138.13	<5.0	<5.0	<5.0	<10	**2,540**	<5.0	<50	<50	<50
	05/07/2002	146.61	7.38	ND	139.23	<5.0	<5.0	<5.0	<10	**561**	17.8	<50	<50	<50
	11/13/2003	145.43	7.91	ND	137.52	<1.0	<1.0	<1.0	<3.0	**191**	NS	NS	NS	NS
	05/20/2004	145.43	7.67	ND	137.76	<1.00	<3.0	<1.0	<6.0	21.5	<5.0	<100	<100	<100
	06/02/2005	145.43	7.27	ND	138.16	<1.00	<3.0	<1.0	<6.0	< 3.0	<5.0	<100	<100	<100
	12/15/2005	145.43	6.13	ND	139.30	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	06/26/2006	145.43	6.19	ND	139.24	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/13/2006	145.43	7.54	ND	137.89	<1.00	<3.00	<1.00	<6.00	4.71	<5.00	<100	<100	<100
	07/10/2007	145.43	7.99	ND	137.44	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/07/2008	145.43	7.34	ND	138.09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	145.43	7.71	ND	137.72	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	145.43	7.14	ND	138.29	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	145.43	7.17	ND	138.26	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	145.43	9.05	ND	136.38	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	145.43	3.01	ND	142.42	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-J (GW-1,3) *Total depth = 12.8'*	05/27/1998	146.63	NG	NG	NA	**11**	<1.0	<1.0	<3	**2,900**	NA	NA	NA	NA
	07/30/1998	146.63	7.92	ND	138.71	**<500**	20	120	220	**13,000**	NA	NA	NA	NA
	09/11/1998	146.63	8.50	ND	138.13	**34**	<1.0	1	<3	**1,100**	NA	NA	NA	NA
	10/26/1998	146.63	7.87	ND	138.76	**18**	<1.0	<1.0	<3	**830**	NA	NA	NA	NA
	11/13/1998	146.63	7.80	ND	138.83	**<100**	<1.0	6	<3	**2,300**	NA	NA	NA	NA
	12/17/1998	146.63	8.56	ND	138.05	**43**	<1.0	21	<3	**2,700**	NA	NA	NA	NA
	01/06/1999	146.63	7.52	ND	139.11	3	<1.0	<1	<3	**720**	NA	NA	NA	NA
	02/09/1999	146.63	7.30	ND	139.33	**35**	1	24	<3	**1500**	NA	NA	NA	NA
	03/29/1999	146.63	7.08	ND	139.55	<1.0	<1.0	<1.0	<3	**100**	NA	NA	NA	NA
	04/26/1999	146.63	7.53	ND	139.10	**116**	<5.0	75.2	<15	**5,150**	62	<50	299	**330**
	05/27/1999	146.63	7.54	ND	139.09	**130**	2	66	<3	**6,500**	NA	NA	NA	NA
	06/24/1999	146.63	8.20	ND	138.43	**54**	<50	<50	<150	**3,780**	<50	**<1,000**	**<1,000**	**<1,000**
	07/20/1999	146.63	8.34	ND	138.29	**<10**	<1.0	<1.0	<3	**460**	NA	NA	NA	NA
	11/04/1999	146.63	7.50	ND	139.13	3	<5.0	<5.0	<15	**473**	<5.0	<100	<100	<100
	01/03/2000	146.63	7.70	ND	138.93	**9.7**	<5.0	<5.0	<15	**513**	<5.0	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 1 Summary of Groundwater Data - VPH												
Well No. (GW Class) *Screen Interval (ft.)*	**Sampling Date**	**Top of Casing Elevation** (ft)	**Depth to Water** (ft)	**Depth to LNAPL** (ft)	**Ground Water Elevation** (ft)	**Benzene** (µg/L)	**Toluene** (µg/L)	**Ethyl-benzene** (µg/L)	**Total Xylenes** (µg/L)	**MTBE** (µg/L)	**Naph-thalene** (µg/L)	**C5-C8 Aliphatics** (µg/L)	**C9-C12 Aliphatics** (µg/L)	**C9-C10 Aromatics** (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-J (Continued)	02/16/2000	146.63	7.44	ND	139.19	3.4	<5.0	<5.0	<15	**165**	<5.0	<100	<100	<100
	02/25/2000	146.63	7.02	ND	139.61	4.6	<1.0	4.6	<3.0	**260**	NS	NS	NS	NS
	04/14/2000	146.63	7.61	ND	139.02	<1.0	<5.0	<5.0	<15	**194**	<5.0	<100	<100	<100
	08/21/2000	146.63	7.97	ND	138.66	**10.5**	<5.0	<5.0	<15	**957**	<5.0	<100	<100	<100
	11/20/2000	146.63	7.74	ND	138.89	<5.0	<5.0	<5.0	<10	**322**	<5.0	<50	<50	<50
	02/26/2001	146.63	8.63	ND	138.00	**72.6**	<5.0	35.2	<15	**3,180**	6.3	<100	150	200
	07/16/2001	146.63	7.91	ND	138.72	**43**	<5.0	<5.0	<10	**2,700**	<5.0	<50	129	**258**
	09/07/2001	146.63	9.59	ND	137.04	<5.0	<5.0	<5.0	<10	**146**	<5.0	<50	<50	54.8
	05/07/2002	146.63	7.34	ND	139.29	<5.0	<5.0	<5.0	<10	**512**	<5.0	<50	<50	<50
	05/20/2004	145.46	7.50	ND	137.96	<1.00	<3.0	<1.0	<6.0	**144**	<5.0	<100	<100	<100
	11/08/2004	145.46	NG	NG	NA	<1.00	<3.0	8.1	<6.0	**1,050**	<5.0	<100	<100	<100
	06/02/2005	145.46	7.4	ND	138.06	<1.00	<3.0	< 3.0	<6.0	< 3.0	<5.0	<100	<100	<100
	12/15/2005	145.46	5.71	ND	139.75	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/26/2006	145.46	6.26	ND	139.20	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/13/2006	145.46	7.15	ND	138.31	<1.00	<3.00	<1.00	<6.00	3.70	<5.00	<100	<100	<100
	07/10/2007	145.46	7.59	ND	137.87	<1.00	<3.00	<1.00	<6.00	8.12	<5.00	<100	<100	<100
	01/07/2008	145.46	7.01	ND	138.45	<1.00	<3.00	<1.00	<6.00	4.22	<5.00	<100	<100	<100
	06/19/2008	145.46	7.32	ND	138.14	<1.00	<3.00	<1.00	<4.00	5.01	<5.00	<100	<100	<100
	01/14/2009	145.46	6.88	ND	138.58	<1.00	<3.00	<1.00	<6.00	13.5	<5.00	<100	<100	<100
	06/19/2009	145.46	6.75	ND	138.71	<1.00	<3.00	<1.00	<6.00	8.09	<5.00	<100	<100	<100
	12/22/2009	145.46	6.90	ND	138.56	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	145.46	7.61	ND	137.85	<1.00	<3.00	<1.00	<6.00	17.7	<5.00	<100	<100	<100
	06/28/2011	145.46	6.93	ND	138.53	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-K (GW-1,3) *3-16'*	06/24/1999	145.14	8.03	ND	137.11	<1.0	<5.0	<5.0	<15	**554**	<5	<100	<100	<100
	08/20/1999	145.14	8.10	ND	137.04	<1.0	<5.0	<5.0	<15	**662**	<5.0	<100	<100	<100
	11/04/1999	145.14	6.81	ND	138.33	<1.0	<5.0	<5.0	<15	**321**	<5.0	<100	<100	<100
	01/03/2000	145.14	7.34	ND	137.80	<1.0	<5.0	<5.0	<15	**340**	<5.0	<100	<100	<100
	04/14/2000	145.14	6.91	ND	138.23	<1.0	<5.0	<5.0	<15	**185**	<5.0	<100	<100	<100
	08/21/2000	145.14	7.52	ND	137.62	<1.0	<5.0	<5.0	<15	**165**	<5.0	<100	<100	<100
	11/20/2000	145.14	6.91	ND	138.23	<5.0	<5.0	<5.0	<10	**192**	<5.0	<50	<50	<50
	05/20/2004	143.97	7.00	ND	136.97	<1.00	<3.0	<1.0	<6.0	**388**	<5.0	<100	<100	<100
	11/18/2004	143.97	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	**591**	<5.0	<100	<100	<100
	06/20/2005	143.97	6.79	ND	137.18	<1.00	<3.0	<1.0	<6.0	54.1	<5.0	<100	<100	<100
	6/20/2005 Dup	143.97	6.79	ND	137.18	<1.00	<3.0	<1.0	<6.0	68	<5.0	<100	<100	<100
	12/15/2005	143.97	5.08	ND	138.89	<1.00	<3.00	<1.00	<4.00	7.68	<5.00	<100	<100	<100
	12/15/2005 Dup	143.97	5.08	ND	138.89	<1.00	<3.0	<1.0	<4.0	10.1	<5.0	<100	<100	<100
	06/26/2006	143.97	5.01	ND	138.96	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	6/26/2006 Dup	143.97	5.01	ND	138.96	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/13/2006	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	65.8	<5.00	<100	<100	<100
	12/13/2006 Dup	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	65.3	<5.00	<100	<100	<100
	07/10/2007	143.97	7.31	ND	136.66	<1.00	<3.00	<1.00	<6.00	52.0	<5.00	<100	<100	<100
	7/10/2007 Dup	143.97	7.31	ND	136.66	<1.00	<3.00	<1.00	<6.00	46.9	<5.00	<100	<100	<100
	01/07/2008	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	**102**	<5.00	<100	<100	<100
	1/7/2008 dup	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	**98.3**	<5.00	<100	<100	<100
	06/19/2008	143.97	6.92	ND	137.05	<1.00	<3.00	<1.00	<4.00	47.7	<100	<100	<100	<100
	6/19/2008 Dup	143.97	6.92	ND	137.05	<1.00	<3.00	<1.00	<4.00	45.3	<100	<100	<100	<100
	01/14/2009	143.97	6.40	ND	137.57	<1.00	<3.00	<1.00	<6.00	18.6	<5.00	<100	<100	<100
	1/14/2009 dup	143.97	6.40	ND	137.57	<1.00	<3.00	<1.00	<6.00	18.9	<5.00	<100	<100	<100
	06/19/2009	143.97	5.92	ND	138.05	<1.00	<3.00	<1.00	<6.00	8.06	<5.00	<100	<100	<100
	6/19/2009 Dup	143.97	5.92	ND	138.05	<1.00	<3.00	<1.00	<6.00	5.68	<5.00	<100	<100	<100
	12/22/2009	143.97	6.37	ND	137.60	<1.00	<3.00	<1.00	<6.00	9.95	<5.00	<100	<100	<100
	12/22/2009 dup	143.97	6.37	ND	137.60	<1.00	<3.00	<1.00	<6.00	9.30	<5.00	<100	<100	<100
	06/11/2010	143.97	7.34	ND	136.63	<1.00	<3.00	<1.00	<6.00	18.9	<5.00	<100	<100	<100
	6/11/2010 Dup	143.97	7.34	ND	136.63	<1.00	<3.00	<1.00	<6.00	17.8	<5.00	<100	<100	<100
	06/28/2011	143.97	6.41	ND	137.56	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-L (GW-1,3) *3-16'*	06/24/1999	144.28	6.40	ND	137.88	<1.0	<5	<5	<15	11.8	<5	<100	<100	<100
	11/04/1999	144.28	5.45	ND	138.83	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/03/2000	144.28	5.90	ND	138.38	<1.0	<5.0	<5.0	<15	5.7	<5.0	<100	<100	<100
	02/25/2000	144.28	4.05	ND	140.23	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	11/18/2004	143.14	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	143.14	5.25	ND	137.89	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	143.14	3.44	ND	139.70	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/26/2006	143.14	4.03	ND	139.11	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	143.14	5.78	ND	137.36	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 1 Summary of Groundwater Data - VPH												
Well No. (GW Class) *Screen Interval (ft.)*	**Sampling Date**	**Top of Casing Elevation** (ft)	**Depth to Water** (ft)	**Depth to LNAPL** (ft)	**Ground Water Elevation** (ft)	**Benzene** (µg/L)	**Toluene** (µg/L)	**Ethyl-benzene** (µg/L)	**Total Xylenes** (µg/L)	**MTBE** (µg/L)	**Naph-thalene** (µg/L)	**C5-C8 Aliphatics** (µg/L)	**C9-C12 Aliphatics** (µg/L)	**C9-C10 Aromatics** (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-L (Continued)	01/07/2008	143.14	5.81	ND	137.33	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	143.14	5.47	ND	137.67	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	143.14	4.91	ND	138.23	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	143.14	4.14	ND	139.00	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	143.14	4.97	ND	138.17	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	143.14	5.90	ND	137.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-M (GW-1,3) *3-16'*	06/24/1999	144.00	7.26	ND	136.74	<1.0	<5	<5	<15	7.5	<5	<100	<100	<100
	10/13/1999	144.00	16.64	ND	127.36	<1.0	<5.0	<5.0	<15	**376**	<5.0	<100	<100	<100
	11/04/1999	144.00	6.11	ND	137.89	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	04/14/2000	144.00	6.04	ND	137.96	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	08/21/2000	144.00	6.14	ND	137.86	<1.0	<5.0	<5.0	<15	15.2	<5.0	<100	<100	<100
	11/20/2000	144.00	6.03	ND	137.97	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	02/26/2001	144.00	5.57	ND	138.43	<1.0	<5.0	<5.0	<15	**972**	<5.0	**680**	<100	<100
	07/16/2001	144.00	6.21	ND	137.79	<5.0	<5.0	<5.0	<5.0	13.3	<5.0	<50	<50	<50
	01/22/2002	144.00	6.81	ND	137.19	<5.0	<5.0	<5.0	<10	18.1	<5.0	<50	<50	<50
	05/07/2002	144.00	5.92	ND	138.08	<5.0	<5.0	<5.0	<10	15.1	<5.0	<50	<50	<50
	06/20/2005	142.81	5.93	ND	136.88	< 1.00	< 3.00	< 1.00	< 6.0	11.4	< 5.0	<100	<100	<100
	06/26/2006	142.81	4.25	ND	138.56	<1.00	13.1	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	142.81	6.35	ND	136.46	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/07/2008	142.81	5.72	ND	137.09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	142.81	5.82	ND	136.99	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	142.81	5.20	ND	137.61	<1.00	<3.00	<1.00	<6.00	3.87	<5.00	<100	<100	<100
	06/19/2009	142.81	4.70	ND	138.11	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	142.81	5.26	ND	137.55	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	142.81	6.55	ND	136.26	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-N (GW-1,2,3) *12-20'*	08/20/1999	150.65	13.00	ND	137.65	4.3	<5.0	5.8	<15	**475**	<5.0	<100	<100	<100
	11/04/1999	150.65	12.03	ND	138.62	<1.0	<5.0	<5.0	<15	5.7	<5.0	<100	<100	<100
	11/22/1999	150.65	12.33	ND	138.32	<1.0	<5.0	<5.0	<15	36.6	<5.0	<100	<100	<100
	01/03/2000	150.65	12.40	ND	138.25	<1.0	<5.0	<5.0	<15	**73**	<5.0	<100	<100	<100
	04/14/2000	150.65	12.03	ND	138.62	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	08/21/2000	150.65	12.53	ND	138.12	<1.0	<5.0	<5.0	<15	6.4	<5.0	<100	<100	<100
	11/20/2000	150.65	12.03	ND	138.62	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	02/26/2001	150.65	12.02	ND	138.63	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	07/16/2001	150.65	13.10	ND	137.55	<5.0	<5.0	<5.0	<10	**173**	<5.0	<50	<50	<50
	09/07/2001	150.65	13.51	ND	137.14	<5.0	<5.0	<5.0	<10	**1,270**	<5.0	<50	<50	<50
	01/22/2002	150.65	12.76	ND	137.89	<5.0	<5.0	<5.0	<10	11.5	<5.0	<50	<50	<50
	05/07/2002	150.65	11.74	ND	138.91	<5.0	<5.0	<5.0	<10	**281**	<5.0	<50	<50	<50
	10/02/2002	149.45	13.08	ND	136.37	<2.0	<2.0	<2.0	<4.0	**131**	<3.0	<50	<50	<50
	05/10/2003	149.45	11.42	ND	138.03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	11/13/2003	149.45	12.26	ND	137.19	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	05/20/2004	149.45	11.97	ND	137.48	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/02/2005	149.45	11.62	ND	137.83	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	149.45	10.70	ND	138.75	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/26/2006	149.45	10.61	ND	138.84	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	149.45	12.60	ND	136.85	<1.00	<3.00	<1.00	<6.00	3.02	<5.00	<100	<100	<100
	01/07/2007	149.45	11.73	ND	137.72	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	149.45	12.20	ND	137.25	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	149.45	11.61	ND	137.84	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	149.45	11.50	ND	137.95	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	149.45	11.65	ND	137.80	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	149.45	12.41	ND	137.04	<1.00	<3.00	<1.00	<6.00	4.49	<5.00	<100	<100	<100
OW-O (GW-1,3) *12-22'*	08/20/1999	148.84	17.67	ND	131.17	<1.0	<5.0	<5.0	<15	**273**	<5.0	<100	<100	<100
	11/04/1999	148.84	16.02	ND	132.82	<1.0	<5.0	<5.0	<15	**314**	<5.0	<100	<100	<100
	01/03/2000	148.84	16.56	ND	132.28	<1.0	<5.0	<5.0	<15	**284**	<5.0	<100	<100	<100
	04/14/2000	148.84	15.29	ND	133.55	<1.0	<5.0	<5.0	<15	**202**	<5.0	<100	<100	<100
	08/21/2000	148.84	16.87	ND	131.97	<1.0	<5.0	<5.0	<15	**249**	<5.0	<100	<100	<100
	11/20/2000	148.84	16.01	ND	132.83	<5.0	<5.0	<5.0	<5.0	54.5	<5.0	<50	<50	<50
	02/26/2001	148.84	7.04	ND	141.80	<1.0	<5.0	<5.0	<15	13.9	<5.0	<100	<100	<100
	07/16/2001	148.84	17.33	ND	131.51	<5.0	<5.0	<5.0	<10	**343**	<5.0	<50	<50	<50
	09/07/2001	148.84	17.98	ND	130.86	<5.0	<5.0	<5.0	<10	**464**	<5.0	<50	<50	<50
	01/22/2002	148.84	17.38	ND	131.46	<5.0	<5.0	<5.0	<10	**556**	<5.0	<50	<50	<50
	05/07/2002	148.84	15.35	ND	133.49	<5.0	<5.0	<5.0	6	**324**	<5.0	<50	<50	<50
	10/02/2002	144.58	17.62	ND	126.96	<2.0	<2.0	<2.0	<4.0	**399**	<3.0	<50	<50	<50

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 1
Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-O (Continued)	05/10/2003	144.58	15.41	ND	129.17	<1.0	<1.0	<1.0	<1.0	**176**	NS	NS	NS	NS
	05/20/2004	144.58	15.34	ND	129.24	<1.00	<3.0	<1.0	<6.0	**232**	<5.0	<100	<100	<100
	11/18/2004	144.58	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	**211**	8.6	<100	<100	<100
	06/20/2005	144.58	15.46	ND	129.12	<1.00	<3.0	<1.0	<6.0	**150**	< 5.0	<100	<100	<100
	12/15/2005	144.58	12.22	ND	132.36	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/26/2006	144.58	12.63	ND	131.95	<1.00	<3.00	<1.00	<4.00	4.57	<5.00	<100	<100	<100
	12/13/2006	144.58	14.71	ND	129.87	<1.00	<3.00	<1.00	<6.00	45.1	<5.00	<100	<100	<100
	07/10/2007	144.58	16.36	ND	128.22	<1.00	<3.00	<1.00	<6.00	37.0	<5.00	<100	<100	<100
	01/07/2008	144.58	15.62	ND	128.96	<1.00	<3.00	<1.00	<6.00	34.6	<5.00	<100	<100	<100
	06/19/2008	144.58	15.18	ND	129.40	<1.00	<3.00	<1.00	<4.00	28.8	<5.00	<100	<100	<100
	01/14/2009	144.58	14.27	ND	130.31	<1.00	<3.00	<1.00	<6.00	4.20	<5.00	<100	<100	<100
	06/19/2009	144.58	15.72	ND	128.86	<1.00	<3.00	<1.00	<6.00	15.30	<5.00	<100	<100	<100
	12/22/2009	144.58	14.48	ND	130.10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	144.58	16.75	ND	127.83	<1.00	<3.00	<1.00	<6.00	7.56	<5.00	<100	<100	<100
	06/28/2011	144.58	14.82	ND	129.76	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-P (GW-1,3) *12-22'*	08/20/1999	148.60	15.70	ND	132.90	<1.0	<5.0	<5.0	<15	**71.5**	<5.0	<100	<100	<100
	10/13/1999	148.60	14.65	ND	133.95	<1.0	<5.0	<5.0	<15	**82.7**	<5.0	<100	<100	<100
	11/04/1999	148.60	14.09	ND	134.51	<1.0	<5.0	<5.0	<15	67.2	<5.0	<100	<100	<100
	01/03/2000	148.60	14.78	ND	133.82	<1.0	<5.0	<5.0	<15	66.1	<5.0	<100	<100	<100
	04/14/2000	148.60	13.24	ND	135.36	<1.0	<5.0	<5.0	<15	26.3	<5.0	<100	<100	<100
	11/20/2000	148.60	13.88	ND	134.72	<5.0	<5.0	<5.0	<10	5.5	<5.0	<50	<50	<50
	05/10/2003	144.36	13.08	ND	131.28	<2.0	<2.0	<2.0	<4.0	2.7	<3.0	<50	<50	<50
	05/20/2004	144.36	13.77	ND	130.59	<1.00	<3.0	<1.0	<6.0	9.1	<5.0	<100	<100	<100
	11/18/2004	144.36	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	144.36	13.62	ND	130.74	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	144.36	9.23	ND	135.13	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	06/26/2006	144.36	10.46	ND	133.90	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	144.36	14.33	ND	130.03	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/07/2008	144.36	12.35	ND	132.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	144.36	12.19	ND	132.17	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	144.36	11.00	ND	133.36	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	144.36	12.48	ND	131.88	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	144.36	11.19	ND	133.17	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	144.36	14.58	ND	129.78	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-Q (GW-1,3) *2-12'*	11/22/1999	146.91	7.85	ND	139.06	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	01/03/2000	146.91	9.30	ND	137.61	<1.0	<5.0	<5.0	<15	6.1	<5.0	<100	<100	<100
	04/14/2000	146.91	7.51	ND	139.40	<1.0	<5.0	<5.0	<15	62.3	<5.0	<100	<100	<100
	08/21/2000	146.91	8.99	ND	137.92	<1.0	<5.0	<5.0	<15	11.7	<5.0	<100	<100	<100
	11/20/2000	146.91	8.20	ND	138.71	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	02/26/2001	146.91	6.38	ND	140.53	<1.0	<5.0	<5.0	<15	15.1	<5.0	<100	<100	<100
	07/16/2001	146.91	7.02	ND	139.89	<5.0	<5.0	<5.0	<10	6.2	<5.0	<50	<50	<50
	01/22/2002	146.91	9.23	ND	137.68	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	05/07/2002	146.91	7.55	ND	139.36	<5.0	<5.0	<5.0	<10	5.2	<5.0	<50	<50	<50
	06/20/2005	142.68	6.04	ND	136.64	< 1.00	< 3.0	< 1.0	< 6.0	< 3.0	<5.0	< 100	<100	< 100
	12/15/2005	142.68	3.73	ND	138.95	< 1.00	< 3.00	< 1.00	<4.00	< 3.00	<5.00	< 100	<100	< 100
	06/26/2006	142.68	5.09	ND	137.59	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	142.68	5.67	ND	137.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	142.68	6.18	ND	136.50	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/07/2008	142.68	5.83	ND	136.85	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	142.68	5.80	ND	136.88	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	142.68	5.55	ND	137.13	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	142.68	5.01	ND	137.67	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	142.68	5.53	ND	137.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	142.68	8.88	ND	133.80	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-R (GW-1,3) *8-18'*	11/22/1999	140.23	8.52	ND	131.71	<1.0	<5.0	<5.0	<15	11	<5.0	<100	<100	<100
	01/03/2000	140.23	8.97	ND	131.26	<1.0	<5.0	<5.0	<15	35.6	<5.0	<100	<100	<100
	04/14/2000	140.23	7.01	ND	133.22	<1.0	<5.0	<5.0	<15	32.9	<5.0	<100	<100	<100
	08/21/2000	140.23	8.92	ND	131.31	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	02/26/2001	140.23	9.59	ND	130.64	<1.0	<5.0	<5.0	<15	19.7	<5.0	<100	<100	<100
	07/16/2001	140.23	10.11	ND	130.12	<5.0	<5.0	<5.0	<5.0	9.1	<5.0	<50	<50	<50
	01/22/2002	140.23	9.62	ND	130.61	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	05/07/2002	140.23	6.94	ND	133.29	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/02/2002	135.93	9.24	ND	126.69	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 1 Summary of Groundwater Data - VPH												
Well No. (GW Class) *Screen Interval (ft.)*	**Sampling Date**	**Top of Casing Elevation** (ft)	**Depth to Water** (ft)	**Depth to LNAPL** (ft)	**Ground Water Elevation** (ft)	**Benzene** (µg/L)	**Toluene** (µg/L)	**Ethyl-benzene** (µg/L)	**Total Xylenes** (µg/L)	**MTBE** (µg/L)	**Naph-thalene** (µg/L)	**C5-C8 Aliphatics** (µg/L)	**C9-C12 Aliphatics** (µg/L)	**C9-C10 Aromatics** (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-R (Continued)	05/20/2004	135.93	7.32	ND	128.61	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	11/18/2004	135.93	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/20/2005	135.93	7.15	ND	128.78	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	06/26/2006	135.93	5.13	ND	130.80	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	135.93	6.38	ND	129.55	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	135.93	8.21	ND	127.72	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	135.93	5.94	ND	129.99	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	135.93	6.20	ND	129.73	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	135.93	7.28	ND	128.65	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	135.93	7.00	ND	128.93	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/10/2010	135.93	9.26	ND	126.67	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-S (GW-1,3) *12-22'*	11/22/1999	140.29	15.04	ND	125.25	<5.0	<25	<25	<75	30	<25	**<500**	<500	**<500**
	01/03/2000	140.29	15.15	ND	125.14	<1.0	<5.0	<5.0	<15	10.9	<5.0	<100	<100	<100
	04/14/2000	140.29	14.23	ND	126.06	<1.0	<5.0	<5.0	<15	9.6	<5.0	<100	<100	<100
	08/21/2000	140.29	15.24	ND	125.05	<1.0	<5.0	<5.0	<15	5.7	<5.0	<100	<100	<100
	11/20/2000	140.29	8.45	ND	131.84	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	02/26/2001	140.29	15.43	ND	124.86	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	07/16/2001	140.29	15.75	ND	124.54	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	01/22/2002	140.29	15.69	ND	124.60	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	05/07/2002	140.29	14.56	ND	125.73	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/02/2002	136.01	15.78	ND	120.23	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	05/10/2003	136.01	14.44	ND	121.57	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	06/20/2005	136.01	NR	ND	NA	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0	<100	<100	<100
	06/26/2006	136.01	12.02	ND	123.99	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	136.01	13.89	ND	122.12	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	01/07/2008	136.01	14.77	ND	121.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2008	136.01	14.45	ND	121.56	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	136.01	13.57	ND	122.44	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	136.01	14.56	ND	121.45	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	136.01	14.00	ND	122.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/11/2010	136.01	14.95	ND	121.06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/28/2011	136.01	14.34	ND	121.67	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-T (GW-1,2,3) *9-19'*	10/02/2002	142.90	14.96	ND	127.94	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	11/13/2003	142.90	14.52	ND	128.38	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
OW-U (GW-1,2,3) *13-23'*	10/02/2002	142.30	19.46	ND	122.84	<2.0	<2.0	<2.0	<4.0	**87.8**	<3.0	<50	<50	<50
	11/18/2002	142.30	19.04	ND	123.86	<2.0	<2.0	<2.0	<4.0	**77.2**	<3.0	<50	<50	<50
	11/13/2003	142.30	18.98	ND	123.32	<1.0	<1.0	<1.0	<1.0	52.6	NT	NT	NT	NT
	05/20/2004	142.30	18.80	ND	123.50	<1.00	<3.0	<1.0	<6.0	19.9	<5.0	<100	<100	<100
	06/20/2005	142.30	17.64	ND	124.66	<1.00	<3.0	<1.0	<6.0	4.3	<5.0	<100	<100	<100
	06/26/2006	142.30	14.87	ND	127.43	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	07/10/2007	142.30	18.55	ND	123.75	<1.00	<3.00	<1.00	<6.00	8.78	<5.00	<100	<100	<100
	01/07/2008	142.30	18.65	ND	123.65	<1.00	<3.00	<1.00	<6.00	20.8	<5.00	<100	<100	<100
	06/19/2008	142.30	18.29	ND	124.01	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	01/14/2009	142.30	16.95	ND	125.35	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	06/19/2009	142.30	18.23	ND	124.07	<1.00	<3.00	<1.00	<6.00	6.88	<5.00	<100	<100	<100
	12/23/2009	142.30	17.50	ND	124.80	<1.00	<3.00	<1.00	<6.00	11.1	<5.00	<100	<100	<100
	06/10/2010	142.30	18.67	ND	123.63	<1.00	<3.00	<1.00	<6.00	4.61	<5.00	<100	<100	<100
OW-ER (GW-1,3) *Total depth = 7.15'*	05/20/1998	Unknown	NG	NG	NA	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	07/30/1998	Unknown	6.44	ND	NA	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	09/11/1998	Unknown	7.13	ND	NA	<1.0	<1.0	<1.0	<3	4	NA	NA	NA	NA
	10/26/1998	Unknown	6.43	ND	NA	<1.0	<1.0	<1.0	<3	6	NA	NA	NA	NA
	11/13/1998	Unknown	6.39	ND	NA	<1.0	<1.0	<1.0	<3	7	NA	NA	NA	NA
	12/17/1998	Unknown	6.67	ND	NA	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	01/06/1999	Unknown	6.13	ND	NA	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
AS-3 (GW-1,3) *17.5-20'*	10/02/2002	147.13	9.97	ND	137.16	<2.0	<2.0	<2.0	<4.0	3.3	<3.0	<50	<50	<50
AS-6 (GW-1,3) *16.5-19'*	10/02/2002	147.65	9.50	ND	138.15	**80.3**	135	544	2,397	**3,930**	**172**	**<500**	**1,120**	**4,220**

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA	Table 1 Summary of Groundwater Data - VPH

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
AS-9	07/30/1998	147.34	4.31	ND	143.03	**17**	<1.0	8	<3	**600**	NA	NA	NA	NA
(GW-1,3)	10/26/1998	147.34	7.30	ND	140.04	**13**	<1.0	2	<3	**400**	NA	NA	NA	NA
17.5-20'	11/13/1998	147.34	7.30	ND	140.04	**8**	<1.0	2	<3	**210**	NA	NA	NA	NA
	12/17/1998	147.34	7.60	ND	139.74	**<20**	<1.0	<1.0	<3	**300**	NA	NA	NA	NA
	01/06/1999	147.34	6.97	ND	140.37	**<20**	<1.0	<1.0	<3	**570**	NA	NA	NA	NA
	02/09/1999	147.34	6.65	ND	140.69	**19**	<1.0	48	<3	**380**	NA	NA	NA	NA
AS-10	10/02/2002	144.11	6.84	ND	137.27	<2.0	<2.0	<2.0	<4.0	7.1	<3.0	**1,120**	<50	<50
(GW-1,3)														
18.5-20'														
RW-2	06/02/2005	144.47	NG	NG	NA	< 1.00	< 3.0	10.6	16.8	63.7	5.6	<100	<100	154
RW-3A	06/02/2005	Unknown	NG	NG	NA	< 1.00	< 3.0	< 1.0	< 6.0	< 3.0	< 5.0	<100	<100	<100
RW-4	11/18/2004	Unknown	NG	NG	NA	<1.00	<3.0	1.7	4.5	22.9	<5.0	<100	<100	<100
RW-6	06/02/2005	Unknown	NG	NG	NA	2.8	7.1	47.6	83.9	**300**	13.5	238	<100	**528**

Notes:

µg/L = micrograms per liter
ND = not detected
NA = not applicable
NG = not gauged
DU = data unavailable
NS = not sampled
< = values less than laboratory detection limits
Bold values indicate that the analyte was detected at a concentration above Method 1 GW-1 standards.
Italicized values indicate that the analyte was detected at a concentration above Method 1 GW-2 standards.
Underlined values indicate that the analyte was detected at a concentration above Method 1 GW-3 standards.
Comprehensive site survey including top of PVC well casing elevations was conducted in October 2002 by Hancock Survey Associates, Inc.

QA/QC INFO:
LAST UPDATED
BY: CMR
DATE: 4/6/2023
LAST CHECKED
BY: PDC
DATE: 4/10/2023

95-214880
Global Companies LLC
Mobil Station No. 1436
309 Lowell Street
Andover, MA

Table 2
Groundwater Exposure Point Concentrations

Well No. (GW Class) *Screen Interval (ft.)*	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-13 (GW-1,3) *5-20'*	07/11/2022	147.67	9.32	ND	138.35	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	130
	09/27/2022	147.67	9.32	ND	138.35	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	147.67	8.10	ND	139.57	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	147.67	8.27	ND	139.40	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	**220**
	Exposure Point Concentration					0.5	0.5	0.5	1.5	0.5	2.5	50	50	113
MW-1 (GW-1,3) *5-15'*	07/11/2022	147.21	7.65	ND	139.56	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/27/2022	147.21	7.89	ND	139.32	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	147.21	6.42	ND	140.79	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	147.21	6.43	ND	140.78	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	Exposure Point Concentration					0.5	0.5	0.5	1.5	0.5	2.5	50	50	50
MW-3 (GW-1,2,3) *5-15'*	07/11/2022	147.60	9.10	ND	138.50	<2.0	<2.0	<2.0	<6.0	<2.0	<10	<200	<200	<200
	09/27/2022	147.60	9.13	ND	138.47	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	147.60	8.06	ND	139.54	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	147.60	8.02	ND	139.58	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	Exposure Point Concentration					0.5	0.5	0.5	1.9	0.5	2.5	50	50	50
OW-ED (GW-1,3) *25-35'*	07/11/2022	148.33	10.34	ND	137.99	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	09/27/2022	148.33	10.24	ND	138.09	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/28/2022	148.33	9.18	ND	139.15	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	03/27/2023	148.33	8.55	ND	139.78	<1.0	<1.0	<1.0	<3.0	4.5	<5.0	<100	<100	<100
	Exposure Point Concentration					0.5	0.5	0.5	1.5	0.5	2.5	50	50	50
	Maximum Exposure Point Concentration					0.5	0.5	1	1.9	0.5	2.5	50	50	113

Notes:

µg/L = micrograms per liter

ND = not detected

NG = not gauged

< = values less than laboratory detection limits

Bold values indicate that the analyte was detected at a concentration above Method 1 GW-1 standards.

Italicized values indicate that the analyte was detected at a concentration above Method 1 GW-2 standards.

Underlined values indicate that the analyte was detected at a concentration above Method 1 GW-3 standards.

Comprehensive site survey including top of PVC well casing elevations was conducted in October 2002 by Hancock Survey Associates, Inc.

QA/QC INFO:

LAST UPDATED

BY: CMR

DATE: 4/6/2023

LAST CHECKED

BY: PDC

DATE: 4/10/2023

Mobil #1436
Global Companies LLC
309 Lowell Street, Andover, MA

Table 3
Summary of Soil Data and Exposure Point Concentrations - VPH and Lead

Confirmatory Sample ID	Sampling Date	Depth below grade (feet)	PID Field Screening Data	C_5-C_8 Aliphatics (mg/kg)	C_9-C_{12} Aliphatics (mg/kg)	C_9-C_{10} Aromatics (mg/kg)	Methyl tert-butyl ether (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH (mg/kg)	Lead (mg/kg)
S-1/GW-1 Standard				100	1,000	100	0.1	2	30	40	400	4	1,000	200
S-1/GW-2 Standard				100	1,000	100	100	40	500	500	100	20	1,000	200
S-1/GW-3 Standard				100	1,000	100	100	40	500	500	500	500	1,000	200
North Wall	**11/16/1989**	**6'**	**NA**	NA	NA	NA	NA	<0.22	<0.3	<0.36	<0.5	NA	52	NA
South Wall	**11/16/1989**	**6'**	**NA**	NA	NA	NA	NA	<0.22	<0.3	<0.5	<0.5	NA	51	NA
East Wall	**11/16/1989**	**6'**	**NA**	NA	NA	NA	NA	<0.22	<0.3	<0.5	12	NA	714	NA
West Wall	**11/16/1989**	**6'**	**NA**	NA	NA	NA	NA	<0.22	6.3	<0.5	23	NA	259	NA
Center/ Bottom	**11/16/1989**	**10'**	**NA**	NA	NA	NA	NA	<0.22	<0.3	<0.5	20	NA	161	NA
MW-1	**01/16/1990**	**5-6.5'**	**ND**	NA	NA	NA	NA	<0.22	<0.3	<0.36	<0.5	NA	NA	NA
MW-2	**01/16/1990**	**4.5-6'**	**9.0**	NA	NA	NA	NA	<0.22	<0.3	<0.36	<0.5	NA	NA	NA
MW-3	**01/16/1990**	**4.5-6'**	**6.0**	NA	NA	NA	NA	<0.22	<0.3	<0.36	<0.5	NA	1,410	NA
MW-4	**01/16/1990**	**4.5-6'**	**3.0**	NA	NA	NA	NA	<0.22	<0.3	<0.36	<0.5	NA	NA	NA
OW-1	**03/26/1990**	**15-16.5'**	**NA**	NA	NA	NA	NA	<0.002	<0.002	<0.002	<0.002	NA	NA	NA
OW-2	**03/26/1990**	**15-16.5'**	**45.0**	NA	NA	NA	NA	0.7	5.2	4.4	21.8	NA	NA	NA
OW-3	**03/26/1990**	**15-16.5'**	**1.0**	NA	NA	NA	NA	<0.002	0.012	<0.002	0.018	NA	NA	NA
OW-4	**03/26/1990**	**5-6.5'**	**ND**	NA	NA	NA	NA	<0.002	<0.002	<0.002	<0.002	NA	NA	NA
OW-5	**03/26/1990**	**10-11.5'**	**3.6**	NA	NA	NA	NA	<0.002	<0.002	<0.002	<0.002	NA	NA	NA
OW-6	**03/27/1990**	**10-11.5'**	**8.6**	NA	NA	NA	NA	0.006	0.032	0.004	0.026	NA	NA	NA
OW-7	**03/27/1990**	**5-6'**	**ND**	NA	NA	NA	NA	<0.002	0.016	<0.002	<0.002	NA	NA	NA
OW-8	**03/27/1990**	**5-6.5**	**2.1**	NA	NA	NA	NA	<0.002	0.014	<0.002	<0.002	NA	NA	NA
OW-9	**03/27/1990**	**5-6.5**	**2.3**	NA	NA	NA	NA	<0.002	0.026	<0.002	<0.002	NA	NA	NA
OW-F	**05/07/1990**	**7-7.5**	**ND**	NA	NA	NA	NA	<0.002	<0.002	<0.002	0.007	NA	<40	NA
AS-6	**05/30/1998**	**10-11'**	**380.0**	1,570	2,180	1,140	5.8	<0.92	46.2	80	523	535	NA	NA
AS-6	**05/30/1998**	**15-16.5'**	**499.0**	192	164	94	3.85	<0.23	3.37	5.5	37.87	3.6	NA	NA
AS-7	**05/30/1998**	**10-12'**	**ND**	<1.3	<1.3	<1.3	<0.066	<0.026	<0.026	<0.026	<0.079	<0.066	NA	NA
OW-12	**05/03/1999**	**9-11'**	**352.0**	<1.0	1.4	4.0	0.098	<0.020	<0.020	0.026	0.082	0.154	NA	NA
OW-13	**05/03/1999**	**9-13'**	**286-781**	16.6	109	63.6	<0.16	<0.063	0.149	1.12	4.64	0.53	NA	NA
OW-BD	**10/25/2000**	**9-11'**	**12.4**	<5.6	<5.6	<5.6	<0.11	<0.11	<0.11	<0.11	<0.22	<0.11	NA	NA
MW-2D	**10/25/2000**	**8-12'**	**607**	4,410	6,670	420	<5.6	<5.6	22.7	160	1,091	70.2	NA	NA
MW-5D	**09/10/2002**	**6-8'**	**1074**	71.6	179	245	0.104	<0.23	0.916	0.609	26.14	3.3	NA	NA
NE SW	**4/10/2014**	**6.5'**	**3.0**	<1.18	<0.392	0	<0.0783	<0.0783	<0.0783	<0.0783	<0.0783	<0.0783	NA	5.54
SW SW	**4/10/2014**	**6.5'**	**0.0**	<0.918	<0.306	<0.306	<0.0612	<0.0612	<0.0612	<0.0612	<0.0612	<0.0612	NA	5.14
NW SW	**4/10/2014**	**6'**	**0.0**	<0.875	0.525	0.677	<0.0584	<0.0584	<0.0584	<0.0584	<0.0584	<0.0584	NA	6.12
UST 6K East	**4/10/2014**	**6.5'**	**472.2**	82.7	224	**405**	<1.57	<1.57	<1.57	<1.57	10.9	10.9	NA	4.57
UST 6K West	**4/10/2014**	**6.5'**	**35.7**	2.92	2.23	2.12	<0.0679	<0.0679	<0.0679	<0.0679	<0.0679	<0.0679	NA	9.9
UST 10K East	**4/10/2014**	**6.5'**	**39.5**	2.72	<0.476	<0.476	<0.0953	<0.0953	0.218	<0.0953	<0.0953	<0.0953	NA	4.7
UST 10K West	**4/10/2014**	**6.5'**	**0.0**	<1.17	<0.389	<0.389	<0.0778	<0.0778	<0.0778	<0.0778	<0.0778	<0.0778	NA	7.15
UST 12K East	**4/10/2014**	**6.5'**	**36.1**	<1.04	<0.345	<0.345	<0.0691	<0.0691	0.0899	<0.0691	<0.0691	<0.0691	NA	4.14
UST 12K West	**4/10/2014**	**6.5'**	**0.1**	<0.896	<0.299	<0.299	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	NA	18.1
PS-1	**4/11/2014**	**12'**	**744.7**	25.3	7.31	20.5	<0.0785	<0.0785	0.224	0.203	1.419	0.714	NA	5.58
PS-2	**4/11/2014**	**11.5'**	**53.1**	2.47	0.647	1.94	<0.0735	<0.0735	<0.0735	<0.0735	<0.0735	<0.0735	NA	6.43
PS-3	**4/11/2014**	**13.5'**	**99.4**	6.78	2.41	5.82	<0.0714	<0.0714	0.0801	<0.0714	0.17	0.188	NA	4.36
PS-4	**4/11/2014**	**NA**	**27.1**	2.21	0.932	1.93	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	NA	4.8
PS-5	**4/11/2014**	**NA**	**325.6**	5.23	3.6	4.87	<0.0730	<0.0730	<0.0730	<0.0730	<0.0730	0.185	NA	5.26
Base NW	**4/23/2014**	**15'**	**19.1**	8.64	4.37	9.23	<0.0605	<0.0605	0.094	<0.0605	0.4113	0.231	NA	4.19
Base SE	**4/23/2014**	**15'**	**2.9**	<1.08	<0.360	0.58	<0.0721	<0.0721	<0.0721	<0.0721	<0.0721	<0.0721	NA	3.53
Base SW	**4/23/2014**	**15'**	**11.4**	<0.820	0.42	0.54	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	NA	2.68
Base NE	**4/23/2014**	**15'**	**NM**	2.75	2.46	2.65	<0.0720	<0.0720	<0.0720	<0.0720	0.111	0.111	NA	13.4
Base N	**4/23/2014**	**15'**	**4.3**	<1.17	<0.391	<0.391	<0.0783	<0.0783	<0.0783	<0.0783	<0.0783	<0.0783	NA	2.61
Base S	**4/23/2014**	**15'**	**5.9**	<1.07	<0.358	<0.358	<0.0715	<0.0715	<0.0715	<0.0715	<0.0715	<0.0715	NA	2.68
SB-1	**04/04/2023**	**6'**	**0.0**	<13	<13	<13	<0.063	<0.063	<0.063	<0.063	<0.19	<0.32	--	--
SB-1	**04/04/2023**	**11'**	**558 - 610**	3,200	<490	1,900	5.8	8.6	<2.4	7.8	103	<12	--	--
SB-1	**04/04/2023**	**16'**	**651 - 32**	38	<12	19	<0.061	0.081	<0.061	0.10	1.2	<0.31	--	--
SB-2	**04/04/2023**	**6'**	**0.0**	<10	<10	<10	<0.052	<0.052	<0.052	<0.052	<0.15	<0.26	--	--
SB-2	**04/04/2023**	**11'**	**815**	2,800	<920	2,800	4.7	11	11	66	880	47	--	--
SB-2	**04/04/2023**	**16'**	**415**	<13	<13	<13	<0.065	<0.065	<0.065	<0.065	0.32	<0.33	--	--
SB-3	**04/04/2023**	**6'**	**0.0**	<11	<11	<11	<0.057	<0.057	<0.057	<0.057	<0.17	<0.29	--	--
SB-3	**04/04/2023**	**11'**	**0.1**	<14	<14	<14	<0.068	<0.068	<0.068	<0.068	<0.21	<0.34	--	--
SB-3	**04/04/2023**	**16'**	**0.0**	<12	<12	<12	<0.059	<0.059	<0.059	<0.059	<0.18	<0.29	--	--
SB-4	**04/04/2023**	**6'**	**0.0**	<11	<11	<11	<0.055	<0.055	<0.055	<0.055	<0.17	<0.28	--	--
SB-4	**04/04/2023**	**11'**	**764**	960	270	520	2.0	0.90	<0.65	4.1	36	4.1	--	--
SB-4	**04/04/2023**	**16'**	**32.0**	<13	<13	<13	<0.065	<0.065	<0.065	<0.065	<0.20	<0.32	--	--
SB-5	**04/04/2023**	**6'**	**0.0**	<12	<12	<12	<0.062	<0.062	<0.062	<0.062	<0.18	<0.31	--	--
SB-5	**04/04/2023**	**11'**	**0.1**	<11	<11	<11	<0.066	<0.066	<0.066	<0.066	<0.20	<0.33	--	--
SB-5	**04/04/2023**	**16'**	**0.0**	<13	<13	<13	<0.054	<0.054	<0.054	<0.054	<0.16	<0.27	--	--
SB-6	**04/04/2023**	**6'**	**0.4**	<13	<13	<13	<0.067	<0.067	<0.067	<0.067	<0.20	<0.34	--	--
SB-6	**04/04/2023**	**11'**	**0.1**	<14	<14	<14	<0.069	<0.069	<0.069	<0.069	<0.21	<0.34	--	--
SB-6	**04/04/2023**	**16'**	**0.1**	<13	<13	<13	<0.064	<0.064	<0.064	<0.064	<0.19	<0.32	--	--
SB-1 - SB-6	**04/04/2023 Average**			394	59	296	0.72	1.2	0.72	4.4	204	25.6	--	--
Maximum Concentration				**394**	224	**405**	**0.79**	1.2	6.3	4.4	**204**	**26**	1,410	18
Average Concentration				22	--	33	0.098	--	--	--	6.8	1.6	--	--
Number of Samples				25	--	25	25	--	--	--	44	25	--	--
Number of Samples Above Lowest S-1 Standard				1	--	2	2	--	--	--	1	2	--	--
Percent of Samples Above Lowest S-1 Standard				96%	--	92%	92%	--	--	--	98%	92%	--	--
Number of Samples Above 10 Times Lowest S-1 Standard				0	--	0	0	--	--	--	0	0	--	--

Notes:
PID = photoionization detector.
VPH = volatile petroleum hydrocarbons.
NA = not applicable (no sample).
ND = not detected.
< *x* indicates parameter not detected at a concentration greater than the laboratory method detection limit (*x*).
MCP Method 1 S-1 Soil Standards from Table 2, 310 CMR 40.0975 (6)(a), (b) & (c), December 27, 2019.
The maximum historic detection of lead (18 mg/kg) is below the Background for Natural Soil (100 mg/kg) and is therfore not considered a contaminant of concern (COC).
Background for Natural Soil from Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil (MassDEP, May 23, 2002).
Historical total petroleum hydrocarbon (TPH) data superseded by VPH and extractable petroleum hydrocarbons (EPH) and is therefore not considered a COC.
mg/kg = milligrams per kilogram.
Orange shading indicates sample location superseded by subsequent investigation.
Blue shading indicates data (SB-1 through SB-6) that were combined to represent a single sample point, based on the close proximity of the soil borings.
Green shading represents Exposure Point Concentration (EPC; the maximum concentration if S-1/GW-1 standard met, otherwise the average concentration).
All EPCs meet S-1/GW-1 standards; therefore, no Upper Concentration Limit was exceeded.

Mobil #1436
Global Companies LLC
Andover, MA

Table 4

Summary of Exposure Point Concentrations - EPH, Metals and PCBs

Sample ID	S-1/GW-1	S-1/GW-2	S-1/GW-3	Background for Natural Soil	B-2 5-7' 06/14/1999	MW-2D 8-12' 10/25/2000	GES-B5 2-4' 09/10/2002	GES-B5 8' 09/10/2002	MW-5D 6-8' 09/10/2002	MW-5D 12-13' 09/10/2002	MW-5D 14-16' 09/10/2002	MW-5D 31-33' 09/10/2002	MW-5DD 3-4' 02/04/2003	MW-5DD 8' 02/04/2003	VP-1 3' 02/04/2003	SB-1 6' 04/04/2023	SB-1 11' 04/04/2023
EPH (mg/kg)																	
C9-C18 Aliphatics	1,000	1,000	1,000	--	<3.0	460	6.97	9.86	289	--	297	7.04	--	--	--	28	280
C19-C36 Aliphatics	3,000	3,000	3,000	--	6.6	170	<8.3	13.1	825	--	188	<9.2	--	--	--	200	120
C11-C22 Aromatics	1,000	1,000	1,000	--	6.3	180	<18	<19	326	--	101	<20	--	--	--	66	110
Acenaphthene	4	1,000	1,000	0.5	<0.5	<5.6	<0.52	<0.55	<0.53	--	ND	<0.58	--	--	--	<0.11	0.34
Acenaphthylene	1	600	10	0.5	<0.5	<5.6	<0.52	<0.55	<0.53	--	ND	<0.58	--	--	--	<0.11	<0.11
Anthracene	1,000	1,000	1,000	1	<0.5	<5.6	<0.52	<0.55	<0.53	--	ND	<0.58	--	--	--	<0.11	<0.11
Benzo(a)anthracene	7	7	7	2	<0.5	<5.6	<0.52	<0.55	<0.53	--	1.32	<0.58	--	--	--	<0.11	<0.11
Benzo(a)pyrene	2	2	2	2	<0.5	<5.6	<0.52	<0.55	<0.53	--	1.41	<0.58	--	--	--	<0.11	<0.11
Benzo(b)fluoranthene	7	7	7	2	<0.5	<5.6	<0.52	<0.55	<0.53	--	1.64	<0.58	--	--	--	<0.11	<0.11
Benzo(g,h,i)perylene	1,000	1,000	1,000	1	<0.5	<5.6	<0.52	<0.55	<0.53	--	0.960	<0.58	--	--	--	<0.11	<0.11
Benzo(k)fluoranthene	70	70	70	1	<0.5	<5.6	<0.52	<0.55	<0.53	--	1.05	<0.58	--	--	--	<0.11	<0.11
Chrysene	70	70	70	2	<0.5	<5.6	<0.52	<0.55	<0.53	--	1.95	<0.58	--	--	--	<0.11	<0.11
Dibenzo(1,2,3-cd)pyrene	0.7	0.7	0.7	0.5	<0.5	<5.6	<0.52	<0.55	<0.53	--	ND	<0.58	--	--	--	<0.11	<0.11
Fluoranthene	1,000	1,000	1,000	4	<0.5	<5.6	<0.52	0.776	<0.53	--	4.42	<0.58	--	--	--	0.11	<0.11
Fluorene	1,000	1,000	1,000	1	<0.5	<5.6	<0.52	<0.55	<0.53	--	ND	<0.58	--	--	--	<0.11	0.21
Indeno(1,2,3-cd)pyrene	7	7	7	1	<0.5	<5.6	<0.52	<0.55	<0.53	--	1.81	<0.58	--	--	--	<0.11	<0.11
2-Methylnaphthalene	0.7	80	300	0.5	<0.5	31	<0.52	<0.55	5.38	--	9.44	<0.58	--	--	--	<0.11	4.2
Naphthalene	4	20	500	0.5	<0.5	36	<0.52	<0.55	1.96	--	5.69	<0.58	--	--	--	<0.11	0.83
Phenanthrene	10	500	500	3	<0.5	6.3	<0.52	<0.55	<0.53	--	3.01	<0.58	--	--	--	<0.11	0.20
Pyrene	1,000	1,000	1,000	4	<0.5	<5.6	<0.52	<0.55	<0.53	--	3.10	<0.58	--	--	--	<0.11	<0.11
Metals (mg/kg)																	
Arsenic	20	20	20	20	--	28.2	5.9	7.2	6.8	--	20.8	11.3	--	--	--	26	5.5
Barium	1,000	1,000	1,000	50	--	26.1	<18	<18	21.6	--	<23	449	--	--	--	--	--
Cadmium	70	70	70	2	--	<2.2	<0.37	<0.35	<0.41	--	<0.41	<0.35	--	--	--	--	--
Chromium	100	100	100	30	--	25.2	15.0	13.7	14.6	--	23.1	28.0	--	--	--	--	--
Mercury	20	20	20	0.3	--	<0.11	<0.028	0.057	<0.031	--	<0.032	<0.035	--	--	--	--	--
Selenium	400	400	400	0.5	--	<1.1	<0.92	<0.89	<1.0	--	<1.0	<0.89	--	--	--	--	--
Silver	100	100	100	0.6	--	<2.2	<0.46	<0.44	<0.51	--	<0.51	<0.44	--	--	--	--	--
PCBs (mg/kg)																	
Total PCBs	1	1	1	--	--	--	--	<0.11	2.136	--	--	--	<0.70	0.694	0.182	1.27	0.67

Notes:
EPH = extractable petroleum hydrocarbons.
PCBs = polychlorinated biphenyls.
< *x* indicates parameter not detected at a concentration greater than the laboratory method detection limit (*x*).
ND = detection limit not shown in available historic documentation.
MCP Method 1 S-1 Soil Standards from Table 2, 310 CMR 40.0975 (6)(a), (b) & (c), December 27, 2019.
Background for Natural Soil from Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil (MassDEP, May 23, 2002).
Compounds with maximum historic detections at or below Background for Natural Soil are not considered contaminants of concern (COCs).
mg/kg = milligrams per kilogram.
Orange shading indicates sample location superseded by subsequent investigation.
Blue shading indicates data (SB-1 through SB-6) that were combinded to represent a single sample point, based on the close proximity of the soil borings.
Green shading represents Exposure Point Concentration (EPC; the maximum concentration if S-1/GW-1 standard met, otherwise the average concentration).
All EPCs meet S-1/GW-1 standards; therefore, no Upper Concentration Limit was exceeded.

Mobil #1436
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Andover, MA

Table 4

Summary of Exposure Point Concentrations - EPH, Metals and PCBs

Sample ID	S-1/GW-1	S-1/GW-2	S-1/GW-3	Background for Natural Soil	B-2 5-7' 06/14/1999	SB-1 16' 04/04/2023	SB-2 6' 04/04/2023	SB-2 11' 04/04/2023	SB-2 16' 04/04/2023	SB-3 6' 04/04/2023	SB-3 11' 04/04/2023	SB-3 16' 04/04/2023	SB-4 6' 04/04/2023	SB-4 11' 04/04/2023	SB-4 16' 04/04/2023	SB-5 6' 04/04/2023	SB-5 11' 04/04/2023
EPH (mg/kg)																	
C9-C18 Aliphatics	1,000	1,000	1,000	--	<3.0	<11	29	<11	330	<11	<12	<11	<10	90	21	<11	<11
C19-C36 Aliphatics	3,000	3,000	3,000	--	6.6	<11	210	<11	65	96	<12	<11	23	42	34	<11	<11
C11-C22 Aromatics	1,000	1,000	1,000	--	6.3	<11	72	<11	110	42	<12	<11	<10	13	<11	<11	<11
Acenaphthene	4	1,000	1,000	0.5	<0.5	<0.11	<0.11	<0.11	0.31	0.12	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Acenaphthylene	1	600	10	0.5	<0.5	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Anthracene	1,000	1,000	1,000	1	<0.5	<0.11	<0.11	<0.11	<0.11	0.25	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Benzo(a)anthracene	7	7	7	2	<0.5	<0.11	<0.11	<0.11	<0.11	0.77	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Benzo(a)pyrene	2	2	2	2	<0.5	<0.11	<0.11	<0.11	<0.11	0.83	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Benzo(b)fluoranthene	7	7	7	2	<0.5	<0.11	0.17	<0.11	<0.11	1.0	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Benzo(g,h,i)perylene	1,000	1,000	1,000	1	<0.5	<0.11	0.14	<0.11	<0.11	0.51	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Benzo(k)fluoranthene	70	70	70	1	<0.5	<0.11	<0.11	<0.11	<0.11	0.39	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Chrysene	70	70	70	2	<0.5	<0.11	0.14	<0.11	<0.11	0.92	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Dibenzo(1,2,3-cd)pyrene	0.7	0.7	0.7	0.5	<0.5	<0.11	<0.11	<0.11	<0.11	0.14	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Fluoranthene	1,000	1,000	1,000	4	<0.5	<0.11	0.32	<0.11	<0.11	1.6	<0.12	<0.11	0.11	<0.11	<0.11	<0.11	<0.11
Fluorene	1,000	1,000	1,000	1	<0.5	<0.11	<0.11	<0.11	0.21	<0.11	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Indeno(1,2,3-cd)pyrene	7	7	7	1	<0.5	<0.11	0.11	<0.11	<0.11	0.53	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
2-Methylnaphthalene	0.7	80	300	0.5	<0.5	<0.11	<0.11	<0.11	11	<0.11	<0.12	<0.11	<0.10	<0.11	0.13	<0.11	<0.11
Naphthalene	4	20	500	0.5	<0.5	<0.11	<0.11	<0.11	8.9	<0.11	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Phenanthrene	10	500	500	3	<0.5	<0.11	0.15	<0.11	0.23	1.1	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Pyrene	1,000	1,000	1,000	4	<0.5	<0.11	0.13	<0.11	<0.11	1.6	<0.12	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Metals (mg/kg)																	
Arsenic	20	20	20	20	--	6.2	22	6.5	17	4.7	15	<0.36	5.4	5.3	12	7.2	19
Barium	1,000	1,000	1,000	50	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	70	70	70	2	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	100	100	100	30	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	20	20	20	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	400	400	400	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	100	100	100	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)																	
Total PCBs	1	1	1	--	--	<0.088	0.698	0.34	<0.088	0.25	<0.10	<0.090	<0.083	0.094	<0.091	<0.087	<0.092

Notes:
EPH = extractable petroleum hydrocarbons.
PCBs = polychlorinated biphenyls.
< *x* indicates parameter not detected at a concentration greater than the laboratory method detection limit (*x*).
ND = detection limit not shown in available historic documentation.
MCP Method 1 S-1 Soil Standards from Table 2, 310 CMR 40.0975 (6)(a), (b) & (c), December 27, 2019.
Background for Natural Soil from Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil (MassDEP, May 23, 2002).
Compounds with maximum historic detections at or below Background for Natural Soil are not considered contaminants of concern (COCs).
mg/kg = milligrams per kilogram.
Orange shading indicates sample location superseded by subsequent investigation.
Blue shading indicates data (SB-1 through SB-6) that were combinded to represent a single sample point, based on the close proximity of the soil borings.
Green shading represents Exposure Point Concentration (EPC; the maximum concentration if S-1/GW-1 standard met, otherwise the average concentration).
All EPCs meet S-1/GW-1 standards; therefore, no Upper Concentration Limit was exceeded.

Mobil #1436
Global Companies LLC
Andover, MA

Table 4

Summary of Exposure Point Concentrations - EPH, Metals and PCBs

Sample ID	S-1/GW-1	S-1/GW-2	S-1/GW-3	Background for Natural Soil	B-2 5-7' 06/14/1999	SB-5 16' 04/04/2023	SB-6 6' 04/04/2023	SB-6 11' 04/04/2023	SB-6 16' 04/04/2023	SB-1 - SB-6 04/04/2023	Maximum Historical Concentration	Historical Maximum at or Below Background?	Current Maximum Concentration	Current Average Concentration
EPH (mg/kg)														
C9-C18 Aliphatics	1,000	1,000	1,000	--	<3.0	<11	<12	<11	<11	46.9	460	No	46.9	--
C19-C36 Aliphatics	3,000	3,000	3,000	--	6.6	<11	<12	<11	<11	47.0	825	No	47.0	--
C11-C22 Aromatics	1,000	1,000	1,000	--	6.3	<11	<12	<11	<11	26.6	326	No	26.6	--
Acenaphthene	4	1,000	1,000	0.5	<0.5	<0.11	<0.12	<0.11	<0.11	0.09	0.09	Yes	--	--
Acenaphthylene	1	600	10	0.5	<0.5	<0.11	<0.12	<0.11	<0.11	0.06	0.06	Yes	--	--
Anthracene	1,000	1,000	1,000	1	<0.5	<0.11	<0.12	<0.11	<0.11	0.07	0.07	Yes	--	--
Benzo(a)anthracene	7	7	7	2	<0.5	<0.11	<0.12	<0.11	<0.11	0.10	1.3	Yes	--	--
Benzo(a)pyrene	2	2	2	2	<0.5	<0.11	<0.12	<0.11	<0.11	0.10	1.4	Yes	--	--
Benzo(b)fluoranthene	7	7	7	2	<0.5	<0.11	<0.12	<0.11	<0.11	0.11	1.6	Yes	--	--
Benzo(g,h,i)perylene	1,000	1,000	1,000	1	<0.5	<0.11	<0.12	<0.11	<0.11	0.09	0.96	Yes	--	--
Benzo(k)fluoranthene	70	70	70	1	<0.5	<0.11	<0.12	<0.11	<0.11	0.07	1.1	No	0.07	--
Chrysene	70	70	70	2	<0.5	<0.11	<0.12	<0.11	<0.11	0.11	1.95	Yes	--	--
Dibenzo(1,2,3-cd)pyrene	0.7	0.7	0.7	0.5	<0.5	<0.11	<0.12	<0.11	<0.11	0.06	0.060	Yes	--	--
Fluoranthene	1,000	1,000	1,000	4	<0.5	<0.11	<0.12	<0.11	<0.11	0.16	4.4	No	0.78	--
Fluorene	1,000	1,000	1,000	1	<0.5	<0.11	<0.12	<0.11	<0.11	0.07	0.073	Yes	--	--
Indeno(1,2,3-cd)pyrene	7	7	7	1	<0.5	<0.11	<0.12	<0.11	<0.11	0.08	1.8	No	0.08	--
2-Methylnaphthalene	0.7	80	300	0.5	<0.5	<0.11	<0.12	<0.11	<0.11	0.90	31	No	0.90	0.42
Naphthalene	4	20	500	0.5	<0.5	<0.11	<0.12	<0.11	<0.11	0.59	36	No	0.59	--
Phenanthrene	10	500	500	3	<0.5	<0.11	<0.12	<0.11	<0.11	0.14	6.3	No	0.14	--
Pyrene	1,000	1,000	1,000	4	<0.5	<0.11	<0.12	<0.11	<0.11	0.15	3.1	Yes	--	--
Metals (mg/kg)														
Arsenic	20	20	20	20	--	<3.7	8.3	<3.8	4.4	9.36	28	No	9.36	--
Barium	1,000	1,000	1,000	50	--	--	--	--	--	--	449	No	--	--
Cadmium	70	70	70	2	--	--	--	--	--	--	0	Yes	--	--
Chromium	100	100	100	30	--	--	--	--	--	--	28	Yes	--	--
Mercury	20	20	20	0.3	--	--	--	--	--	--	0	Yes	--	--
Selenium	400	400	400	0.5	--	--	--	--	--	--	0	Yes	--	--
Silver	100	100	100	0.6	--	--	--	--	--	--	0	Yes	--	--
PCBs (mg/kg)														
Total PCBs	1	1	1	--	--	<0.089	<0.092	<0.093	<0.089	1.00	2.14	No	1.00	--

Notes:
EPH = extractable petroleum hydrocarbons.
PCBs = polychlorinated biphenyls.
< *x* indicates parameter not detected at a concentration greater than the laboratory method detection limit (*x*).
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All EPCs meet S-1/GW-1 standards; therefore, no Upper Concentration Limit was exceeded.

FIGURES

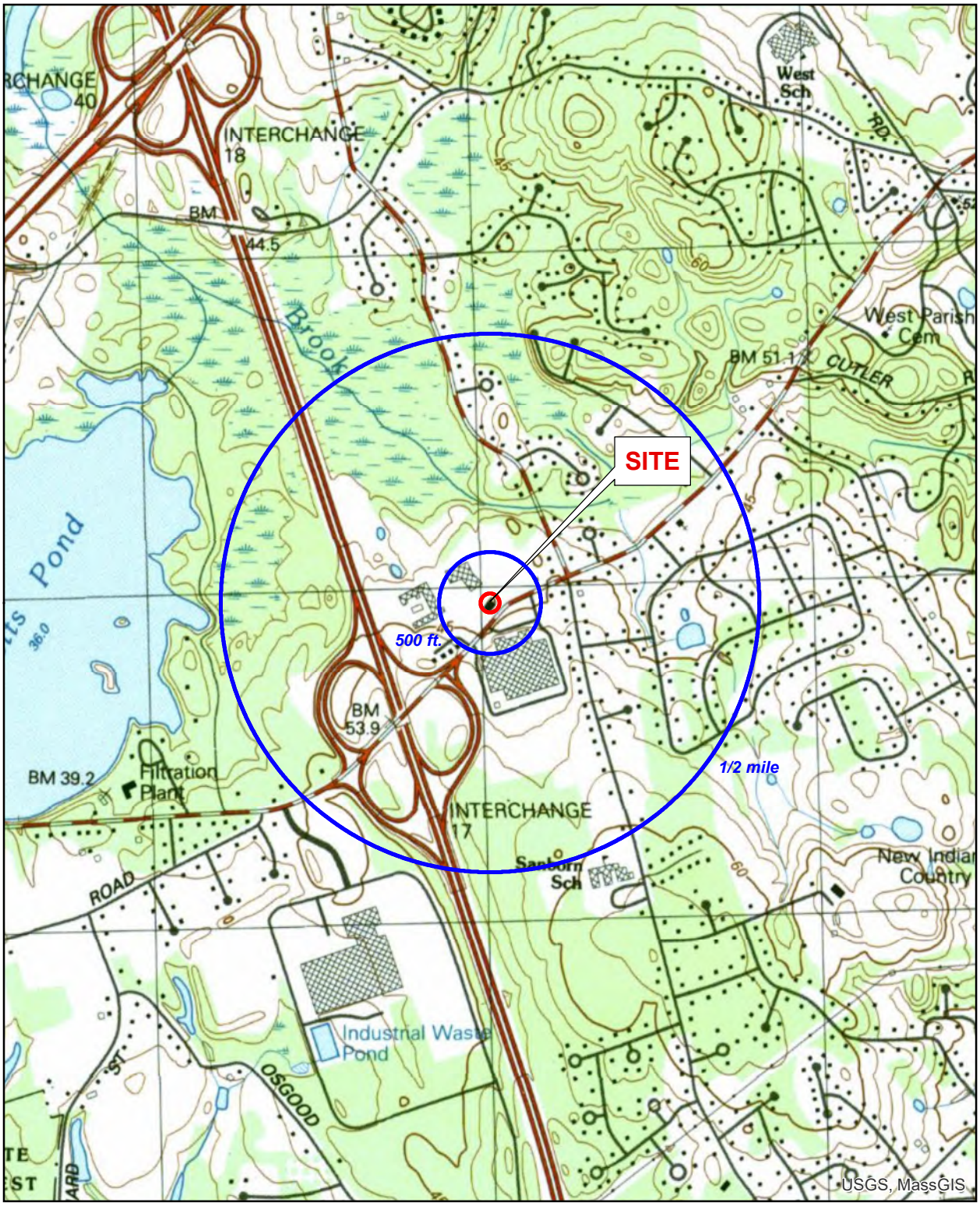
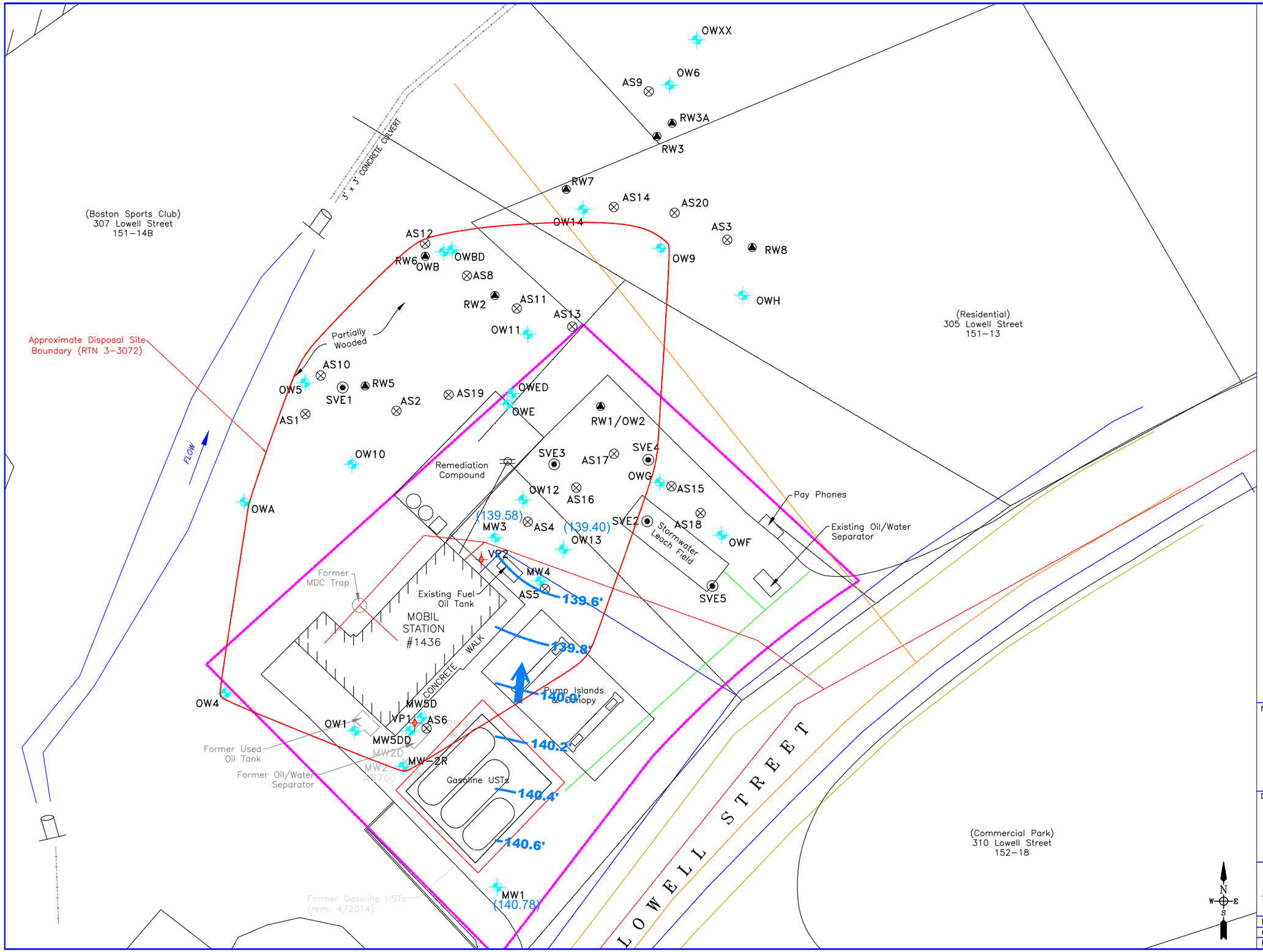


Figure 1: Site Locus

Source: **United States Geological Survey** **Lawrence, MA Quadrangle** **7.5 Minute Series** **Scale: 1:24,000**	ATLAS	**Mobil Station No. 1436** **309 Lowell Street** **Andover, Massachusetts**

Figure 2: Aerial Overview Plan

Source: **MassGIS** **2021 Aerial Imagery** **Scale: 1:2,400**	ATLAS	**Mobil Station No. 1436** **309 Lowell Street** **Andover, Massachusetts**



Legend

- Approximate Property Line
- Approximate Disposal Site Boundary (RTN 3-3072)
- Sanitary Sewer Line
- Storm Sewer Line
- Water Line
- Natural Gas Line
- Telephone Line
- Overhead Electric Line
- Manhole
- Catchbasin
- Water Gate
- Fire Hydrant
- Utility Pole
- Outfall/Culvert
- Soil Boring
- Monitoring Well
- Recovery Well
- Air Sparge Well
- Soil Vapor Extraction Well
- Soil Vapor Monitoring Point
- Surface Water Sampling Point
- ECS-1 Well I.D.
- (139.89') Groundwater Elevation
- 140.0 Water Table Contour (Dashed where inferred)
- Flow Direction Indicator

General Notes:

All locations, dimensions, and property lines depicted on this plan are approximate. This plan should not be used for construction or land conveyance purposes.

0 Approximate Feet 32

NAME/ADDRESS:

GLOBAL COMPANIES LLC
Mobil #1436
309 Lowell Street
Andover, Massachusetts

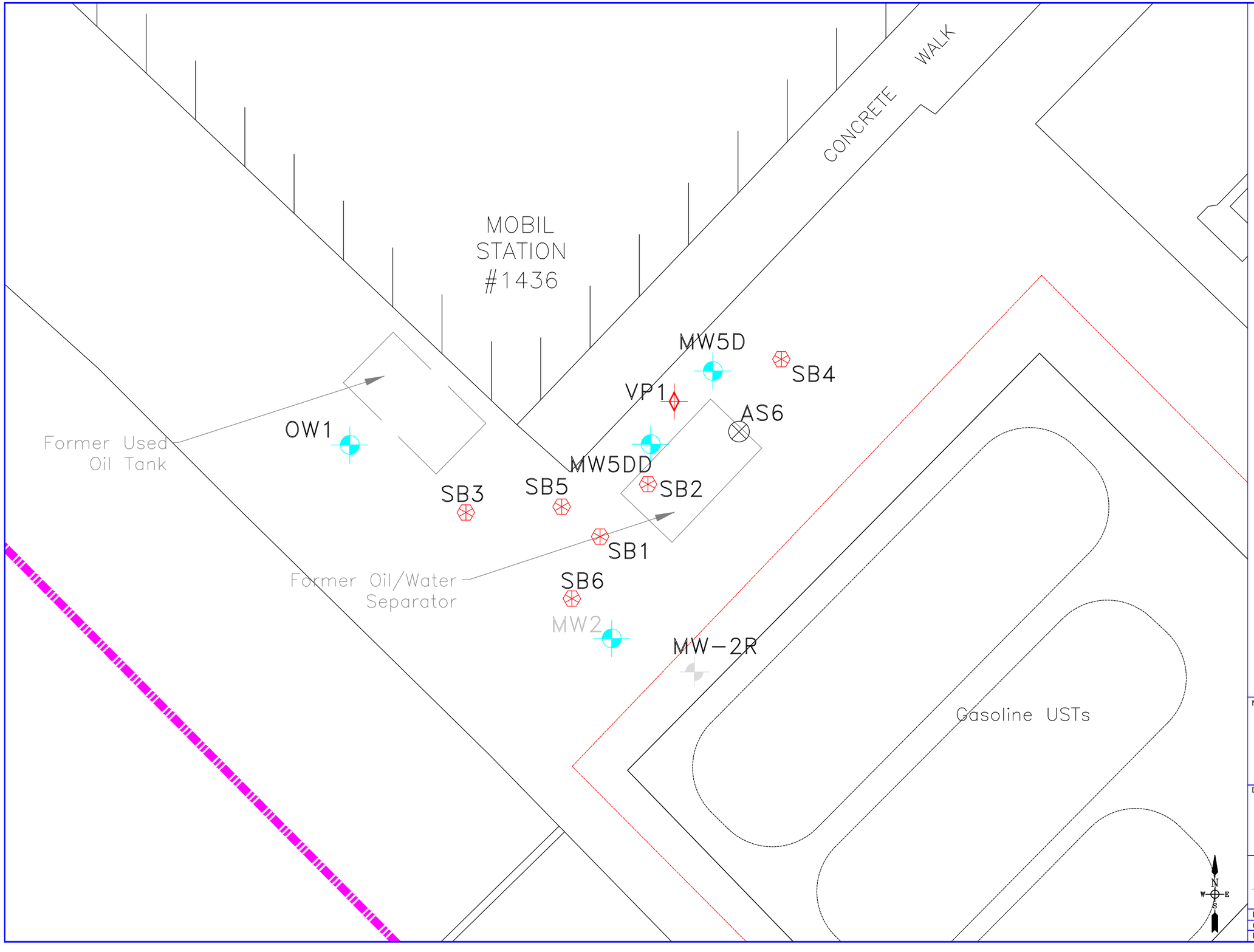
DRAWING TITLE:

Site Plan with Groundwater Contours (3/27/2023)

Atlas Technical Consultants
10 State Street, Suite 100
Woburn, MA 01801
(781) 932-9400 PHONE
(781) 932-6211 FAX

DRAWN BY:	MC/AR/BAM
CHECKED BY:	PDC
PROJECT NO.	95-214880

FIGURE NO. **3**



Legend

- Approximate Property Line
- Sanitary Sewer Line
- Storm Sewer Line
- Water Line
- Natural Gas Line
- Telephone Line
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- 140.0 — Water Table Contour (Dashed where inferred)
- Flow Direction Indicator

General Notes:

All locations, dimensions, and property lines depicted on this plan are approximate. This plan should not be used for construction or land conveyance purposes.

0 Approximate Feet 32

NAME/ADDRESS:

GLOBAL COMPANIES LLC
Mobil #1436
309 Lowell Street
Andover, Massachusetts

DRAWING TITLE:

Site Plan Detail

ATLAS
Atlas Technical Consultants
10 State Street, Suite 100
Woburn, MA 01801
(781) 932-9400 PHONE
(781) 932-6211 FAX

DRAWN BY:	MC/AR/BAM
CHECKED BY:	PDC
PROJECT NO.	95-214880

FIGURE NO. **4**

APPENDIX A
MASSDEP PHASE I SITE ASSESSMENT MAP

MassDEP - Bureau of Waste Site Cleanup

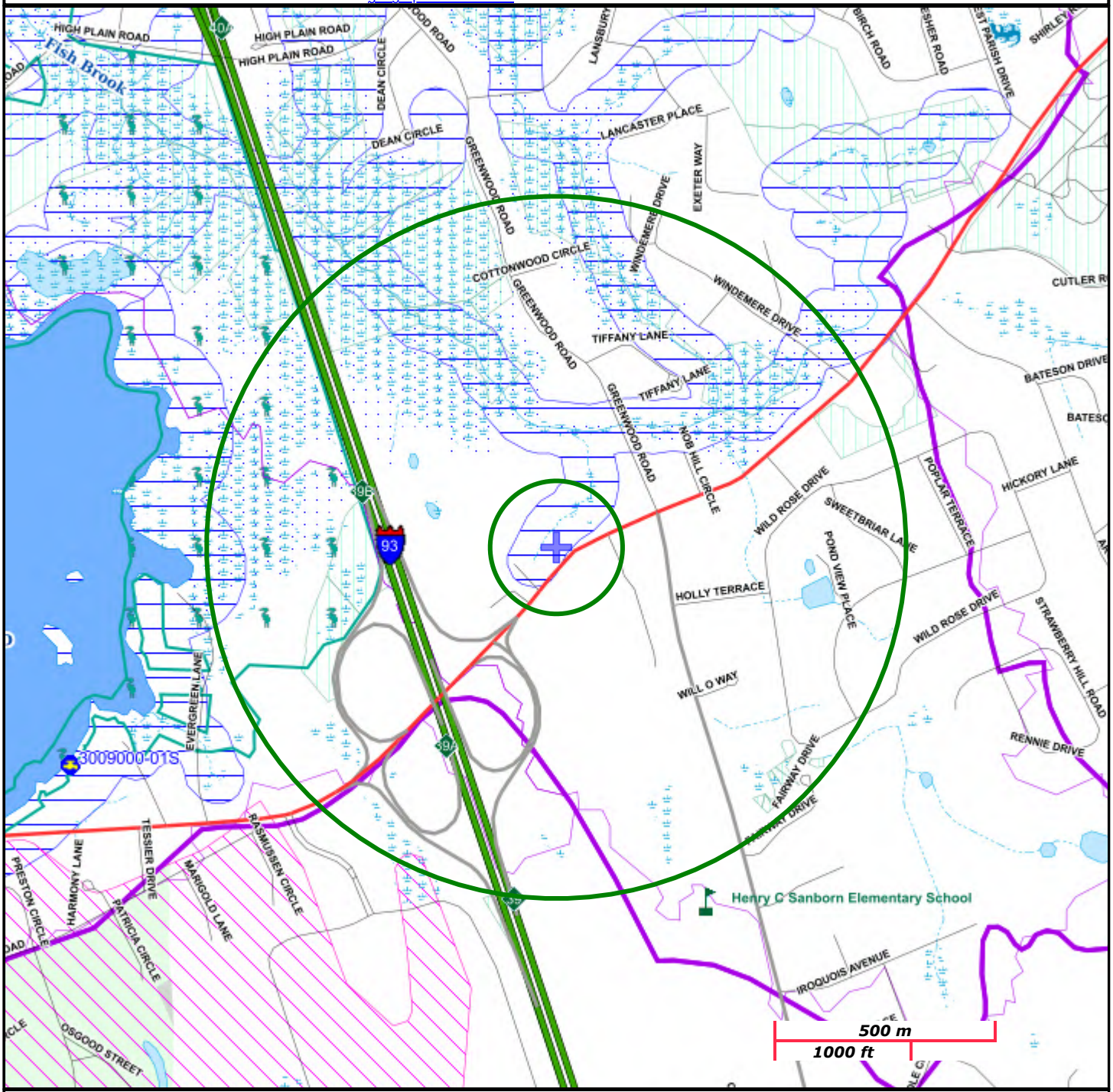
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
MOBIL STATION #1436
309 LOWELL STREET ANDOVER, MA
3-000003072

NAD83 UTM Meters:
4724181mN , 321073mE (Zone: 19)
August 18, 2023

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: https://www.mass.gov/orgs/massgis-bureau-of-geographic-information.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

NHESP Pri-Hab of Rare Species; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

APPENDIX B
ABBREVIATIONS AND ACRONYMS

Abbreviations and Acronyms

ACEC	Area of Critical Environmental Concern
ACO	Administrative Consent Order
ADC	Alternative Daily Cover
ADD	Average Daily Dose
ADE	Average Daily Exposure
AAI	All Appropriate Inquiry
AOC	Area of Concern
AWQC	Ambient Water Quality Criteria
APH	Air Petroleum Hydrocarbon
APS	Additional Polluting Substance
AS	Air Sparge
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
ATG	Automatic Tank Gauge
ATSDR	Agency for Toxic Substances and Disease Registry
AUL	Activity and Use Limitation
BMP	Best Management Practice
BOL	Bill of Lading
BOH	Board of Health
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
BUD	Beneficial Use Determination
CAM	Compendium of Analytical Methods
CEP	Critical Exposure Pathway
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
cfm	Cubic feet per minute
CMR	Code of Massachusetts Regulations
COC	Contaminant of Concern
ConCom	Conservation Commission
CORRACTS	Corrective Action Report
CRA	Comprehensive Remedial Action
CREC	Controlled Recognized Environmental Conditions
CSA	Comprehensive Site Assessment
CSF	Cancer Slope Factor
CSM	Conceptual Site Model
CTDEEP	Connecticut Department of Energy and Environmental Protection
CTDPH	Connecticut Department of Public Health
DEC (R/CI)	Direct Exposure Criteria (Residential/Commercial Industrial)
DEQE	Department of Environmental Quality Engineering
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
DOS	Date of Service
DPS	Downgradient Property Status
DPW	Department of Public Works
DQA	Data Qaulity Assessment
DQO	Data Qaulity Objective
DUE	Data Usability Evaluation
DWSA	Drinking Water Source Area
ECS	Environmental Compliance Services, Inc.
EDB	Ethylene Dibromide
EDR	Environmental Data Resources Inc.
EDR Hist Auto	EDR Historical Automobile
EFR	Enhanced Fluid Recovery
ELCR	Excess Lifetime Cancer Risk
ELUR	Environmental Land Use Restriction
EP	Exposure Point
EPC	Exposure Point Concentration
EPH	Extractable Petroleum Hydrocarbons, MADEP Method 04-1.1
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
ETPH	Extractable Total Petroleum Hydrocarbons
EW	Extraction Well
fbg	Feet Below Grade
FIR	Final Inspection Report
frac tank	Fractionation Tank
ft	Foot
GA	Class GA Groundwater Classification Area
GAC	Granular Activated Carbon
GB	Class GB Groundwater Classification Area
GC/FID	Gas Chromatogram/Flame Ionization Detector
GIS	Geographic Information System
gpm	Gallons per minute
gpd	Gallons per Day
gpy	Gallons per Year
GPR	Ground Penetrating Radar
GW	Groundwater
GWPC	Ground Water Protection Criteria
GW P&T	Groundwater Pump and Treat
GWTS	Groundwater Treatment System
GW-l, GW-2, GW-3	MCP Method 1 Groundwater Categories
HI	Hazard Index
HITME	High Intensity Targeted Multi-Phase Extraction
hp	Horsepower
HREC	Historical Recognized Environmental Conditions
HW GEN	Hazardous Waste Generator
IAS	Indoor Air Sample
I/C DEC	Industrial/Commercial Direct Exposure Criteria
in. HG	inches of mercury
ID	Inside Diameter
IHE	Imminent Hazard Evaluation
IRA	Immediate Response Action
IRIS	Integrated Risk Information System
ISCO	In Situ Chemical Oxidation
IW	Injection Well
IWPA	Interim Wellhead Protection Area

Abbreviations and Acronyms

kg	Kilogram
LCSM	LNAPL Conceptual Site Model
LEL	Lower Explosive Limit
LEP	Licensed Environmental Professional
LGAC	Liquid-Phase Granular Activated Carbon
LNAPL	Light Non-Aqueous Phase Liquid
LRA	Limited Removal Action
LSI	Limited Subsurface Investigation
LSP	Licensed Site Professional
MBAS	Methyl Blue Active Substance
MCP	Massachusetts Contingency Plan
MDL	Method Detection Limit
M.G.L.c. 21E	Massachusetts General Law, chapter 21E
mg	milligram
mg/g	milligrams per gram
mg/m^3	milligrams per cubic meter
mg/L	milligrams per liter
MNA	Monitored Natural Attenuation
Mod	Modification
MPE	Multi-Phase Extraction
MSDS	Material Safety Data Sheet
MSR	Material Shipping Record and Log
msl	Mean Sea Level
MtBE	Methyl Tertiary Butyl Ether
MW	Monitoring Well
ND	Non-detect - not detected above instrument detection limit.
NFRAP	No Further Remedial Action Planned
ng/m^3	Nanogram per cubic meter
NGVD	National Geodetic Vertical Datum
NOAF	Notice of Audit Findings
NOI	Notice of Intent
NON	Notice of Noncompliance
NOR	Notice of Responsibility
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRS	Numerical Ranking System
OD	Outside Diameter
OHM	Oil and Hazardous Materials
OMM	Operation, Maintenance and/or Monitoring
OOC	Order of Conditions
ORC	Oxygen Releasing Compound
ORP	Oxidation-Reduction Potential
ORS	MassDEP Office of Research and Standards
OSHA	Occupational Safety and Health Administration
OSWER	EPA Office of Solid Waste and Emergency Response
OWS	Oil Water Separator
PAH	Polynuclear Aromatic Hydrocarbon
PAOC	Potential Area of Concern
PARCSS	Precision, Accuracy, Representativeness, Comparability, Completeness and Sensitivity
PCB	Polychlorinated Biphenyl
PDWW	Private Drinking Water Well
PEL	Permissible Exposure Limit
Phase I	Phase I Initial Site Investigation
Phase I ESA	Phase I Environmental Site Assessment
Phase II CSA	Phase II Comprehensive Site Assessment
Phase II ESA	Phase II Environmental Site Assessment
Phase III RAP	Phase III Identification, Evaluation and Selection of Comprehensive Remedial Action Alternatives
Phase IV RIP	Phase IV – Implementation of Selected Remedial Action Alternative
PIANO	Parffin, isoparaffin, aromatic, naphthene, and olefin hydrocarbons
PID	Photoionization Detector
PMC	Pollutant Mobility Criteria
POET	Point of Entry Treatment
POTW	Publicaly Owned Treatment Works
PPA	Potentially Productive Aquifer
ppb	Parts-per-Billion
ppm	Parts-per-Million
ppm(v)	Parts per million (by volume)
ppt	Parts per thousand
PRP	Potentially Responsible Party
PSS	Permanent Solution Statement
PVC	Polyvinyl Chloride
QAPP	Quality Assessment Project Plan
RAA	Remedial Action Alternative
RAF	Release Ammendment Form
RAF's	Relative Absorption Factors
RAM	Release Abatement Measure
RAO	Response Action Outcome
RAP	Remedial Action Plan
RAPS	Response Action Performance Standards
RBC	Risk Based Concentration
RC	Risk Characterization
RCs	Reportable Concentrations
RCGW-l, RCGW-2 RCS-l, RCS-	Reportable Concentration Groundwater/Soil Categories
RCP	Reasonable Confidence Protocols
RCRA	Resource Conservation and Recovery Act
RCSA	Regulations of Connecticut State Agencies
REC	Recognized Environmental Condition
RES DEC	Residential Direct Exposure Criteria
RES SAT	Residual Saturation
RfD	Reference Dose
RGP	Remedial General Permit
RIP	Remedy Implementation Plan
RMR	Remedial Monitoring Report
RLF	Release Log Form
RNF	Release Notification Form
ROS	Remedy Operation Status
RL	Reporting Limit

Abbreviations and Acronyms

ROS Report	Phase V Inspection and Monitroing Report in Support of ROS
RSR	Remediation Standard Regulations
RTN	Release Tracking Number
RVC	Residential Volatilization Criteria
RW	Recovery Well
Scfm	Standard cubic feet per minute
sf	Square Feet
S-1, S-2, S-3	MCP Method 1 Soil Categories
SHWS	State Hazardous Waste Site
SOP	Standard Operating Procedures
SOW	Scope-of-Work
SPLP	Synthetic Percipitation Leaching Procedure
SQG	Small Quantity Generator
SRM	Substantial Release Migration
SSDS	Sub-Slab Depressurization System
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
SVVP	Soil Vapor Volatilazation Criteria
SWPC	Surface Water Protection Criteria
SWQG	Surface Water Quality Guidance
TAC	Target Indoor Air Concentration
TCLP	Toxicity Characteristic Leaching Procedure
TDA	Temporary Remedial Discharge Permit Authorization
TOC	Total Organic Carbon
TOR	Threat of Release
TOVs	Total Organic Vapors
TPH	Total Petroleum Hydrocarbons
UCL	Upper Concentration Limit
ug/g	micrograms per gram
ug/Kg	micrograms per kilogram
ug/L	micrograms per liter
ug/m^3	microgram per cubic meter
UHWM	Uniform Hazaradous Waste Manifest
UHWMTN	Uniform Hazaradous Waste Manifest Tracking Number
UR	Unit Risk
UST	Underground Storage Tank
USTCPA	Underground Storage Tank Petroleum Clean-Up Account
USTPCP	Underground Storage Tank Petroleum Clean-Up Account Program
UTM	Universal Transverse Mercator
Vactor	High Vacuum Extractor
VC	Volatilzation Criteria
VEGE	Vacuum Enhanced Groundwater Extraction
VGAC	Vapor-Phase Granular Activated Carbon
VIP	Vapor Intrusion Pathway
VOC	Volatile Organic Compound
VPH	Volatile Petroleum Hydrocarbons, MADEP Method 04-1.1
WPA	Wetlands Protection Act
WWTP	Waste Water Treatment Plant

REGULATORY AGENCIES

BWSC	Bureau of Waste Site Cleanup
CTDEEP	Connecticut Department of Energy and Environmental Protection
CTDPH	Connecticut Department of Public Health
MassDEP	Massachusetts Department of Environmental Protection
MassDOT	Massachusetts Department of Transportation
MassDOR	Massachusetts Department of Revenue
MassGIS	Massachusetts Geographic Information System
NHESP	National Heritage & Endangered Species Program
RIDEM	Rhode Island Department of Environmental Management
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey

SUBCONTRACTORS

ATC	ATC Group Services, LLC
CHI	Clean Harbors, Inc.
Cyn	Cyn Environmental Services, Inc., Stoughton, MA
Drilex	Drilex Environmental, West Boylston, MA
ECS	Environmental Compliance Services, Inc.
ESMI	Environmental Soil Management, Inc., Loudon, NH
Eurofins/Spectrum	Eurofins/Spectrum Analytical, Inc. , Agawam, MA
Geolabs	Geolabs, Inc., Braintree, MA
Geosearch	Geosearch, Inc - Westminster, MA
LaMountain	LaMountain Brothers, Inc, Oxford, MA
New Hampshire Boring	New Hampshire Boring, Inc., Londonderry, NH
Ondrick	Ted Ondrick Company, LLC
STI	Service Tech, Inc.
Tanknology	Tanknology, Inc., Austin, TX

APPENDIX C
CONCEPTUAL SITE MODEL

Conceptual Site Model
Mobil Station #1436
309 Lowell Street, Andover, MA
MassDEP RTN 3-3072

The Site consists of a 0.51-acre parcel located within a commercially-zoned area of Andover. According to previous environmental reports prepared by Applied Geosystems, Inc., Groundwater and Environmental Services, Inc. (GES) and Camp, Dresser and McKee, Inc. (CDM), as well as available historical topographic maps and aerial photographs, the Site was first developed as a gasoline filling station circa 1959. Prior to 1959, the property was reportedly part of a dairy farm operation. The area surrounding the Site consists of both commercial businesses and residential properties. The Site is currently improved with a single-story, slab-on-grade building improved with a Dunkin' restaurant and a convenience store. The Site is serviced by underground municipal water and sanitary sewer utilities as well as overhead electric and communication utilities.

Prior to 1986, the Site was utilized as an automotive repair facility and retail gasoline station. In 1989, the service bays were remodeled and the building was converted to a convenience store. Former Site features associated with the use of the Site as an automotive repair facility included a former 500-gallon waste oil UST (reportedly removed from the Site in 1987), two hydraulic lifts, floor drains, an oil/water separator, a drywell and a former 550-gallon fuel oil UST (reportedly removed from the Site in 1989).

Sensitive receptors located in the vicinity of the Site include an intermittent stream which flows along the northern boundary of the Site and is a tributary to Fish Brook. Fish Brook discharges into Haggets Pond. The Site is also located within the boundaries of a Zone A Surface Water Supply Protection Area associated with Haggets Pond, which supplies drinking water to the Town of Andover. The Haggets Pond surface water intake is located approximately 0.75 miles southwest of the Site. The nearest public water supply (PWS) well is located approximately 1.5 miles to the southeast of the Site. The Site is not located within the boundaries of a Zone II Area, an IWPA, or a PPA. According to previous environmental reports, no private drinking water supply wells are known to be located within 500 feet of the Site. Depth to groundwater beneath the Site has historically been observed at depths ranging from 3 to 13 feet bgs, and groundwater beneath the Site has been historically calculated to flow in a north-northeasterly direction.

Potential human receptors present at the Site under current Disposal Site conditions include adult Site workers, adult and child Site visitors/patrons, adult and child trespassers/passersby, and adult utility workers. Under potential future Disposal Site conditions, potential human receptors that may be present at the Site include all of the above as well as potential future adult and child residents and adult construction workers.

Due to the Site's location within the boundaries of a Zone A Surface Water Supply Protection Area, MCP Method 1 Risk Characterization Groundwater Category GW-1 applies to all groundwater located beneath the Site. Additionally, due to the average annual depth to groundwater being less than 15 feet bgs, MCP Groundwater Category GW-2 also applies to all groundwater located within 30 feet of an occupied structure at the Site. Lastly, MCP Groundwater Category GW-3 applies to all groundwater in the Commonwealth of Massachusetts. For soil, MCP Category S-1 applies to all soil located between the ground surface and 3 feet bgs in unpaved areas of the Site and MCP Soil Category S-2 applies to all soil located between 3 and 15 feet bgs beneath paved surface at the Site. Soil located greater than 15 feet bgs or beneath permanent structures at the Site is classified as MCP Category S-3 soil.

The property first became a MassDEP listed Site following the discovery of petroleum-impacted soil and groundwater during the removal of a 550-gallon fuel oil UST in November 1989. The contaminants were characterized as weathered gasoline. Various environmental reports and remedial response actions have been conducted at the Site since 1989 and are summarized below:

- Excavation and disposal of approximately 30 cubic yards of petroleum impacted soil in November 1989 during former fuel oil UST excavation activities (MassDEP RTN 3-3072);
- Operation of a groundwater recovery, AS, and SVE system at the Site (January 1991 – March 2007);
- Completion of IRA activities associated for MassDEP RTN 3-13955 in August of 1996, associated with a release of gasoline from a malfunctioning gasoline UST flex connector (RTN was subsequently linked to RTN 3-3072);
- Completion of IRA activities associated with a SRM condition identified at the Site in May 1998 following an increase of MTBE concentrations in groundwater (IRA activities were conducted under MassDEP RTN 3-3072);
- Completion of IRA activities associated with the detection of greater than 0.5 inches of LNAPL in monitoring well MW-2 in September 2001. IRA activities were conducted under MassDEP RTN 3-21062 and included hand bailing of LNAPL and an evaluation of potential LNAPL migration pathways (RTN 3-21062 was subsequently linked to RTN 3-3072);
- LNAPL hand-bailing activities were conducted from September through November 2001 under an IRA for MassDEP RTN 3-21062;
- Excavation and disposal of approximately 160 cubic yards of petroleum impacted soil in September 2005 under a RAM during the completion of UST system upgrade activities;
- Excavation and disposal of approximately 756 tons of petroleum impacted soil; the extraction, treatment and subsequent discharge of approximately 60,700 gallons of groundwater; and the extraction and disposal of approximately 9,000 gallons of groundwater during the completion of UST removal and replacement activities in April 2014; and,
- Performance of an ongoing MNA program under ROS, which included semi-annual groundwater sampling for VPH and MNA parameters as well as semi-annual surface water sampling (discontinued in June 2012).

The source of Site petroleum hydrocarbon contamination at the Site is attributed to a release of an unknown quantity of gasoline associated with the historical use of the Site as a gasoline filling station. Impacted soil was identified during the excavation and removal of a former 550-gallon fuel oil UST at the Site in 1989. Subsequent subsurface investigation activities have indicated that the highest concentrations of petroleum hydrocarbon impacts detected in soil are located immediately downgradient of the current gasoline UST and fuel dispenser systems. Additionally, soil impacts have been observed at depths ranging from approximately 4 to 9 feet bgs in the vicinity of the former fuel oil UST that was located near the southeastern corner of the on-site building.

Historically, dissolved-phase VPH constituents have been detected in groundwater samples collected from both on- and off-site groundwater monitoring wells. The highest concentrations of dissolved-phase contaminants were historically located in the vicinity of groundwater monitoring wells OW-13 and MW-2. The furthest historical downgradient detection of VPH constituents (MTBE) has been in downgradient, off-site monitoring well OW-S, located approximately 750 feet

from the source area. The average concentration of VPH C9-C10 aromatics during the four most recent groundwater sampling events (July 2022 through March 2023) met MCP Method 1 GW-1 standards at monitoring wells MW-3 and OW-13. Dissolved-phase VPH target constituents otherwise were not detected at concentrations greater than their applicable GW-1 groundwater standards in any of the groundwater monitoring wells sampled. Additionally, with the exception of one groundwater sample collected from monitoring well OW-K in January 2008, no groundwater samples collected from any on- or off-site monitoring wells have exhibited concentrations of MTBE greater than the MCP Method 1 GW-1 Groundwater Standard for that parameter since at least December 2006.

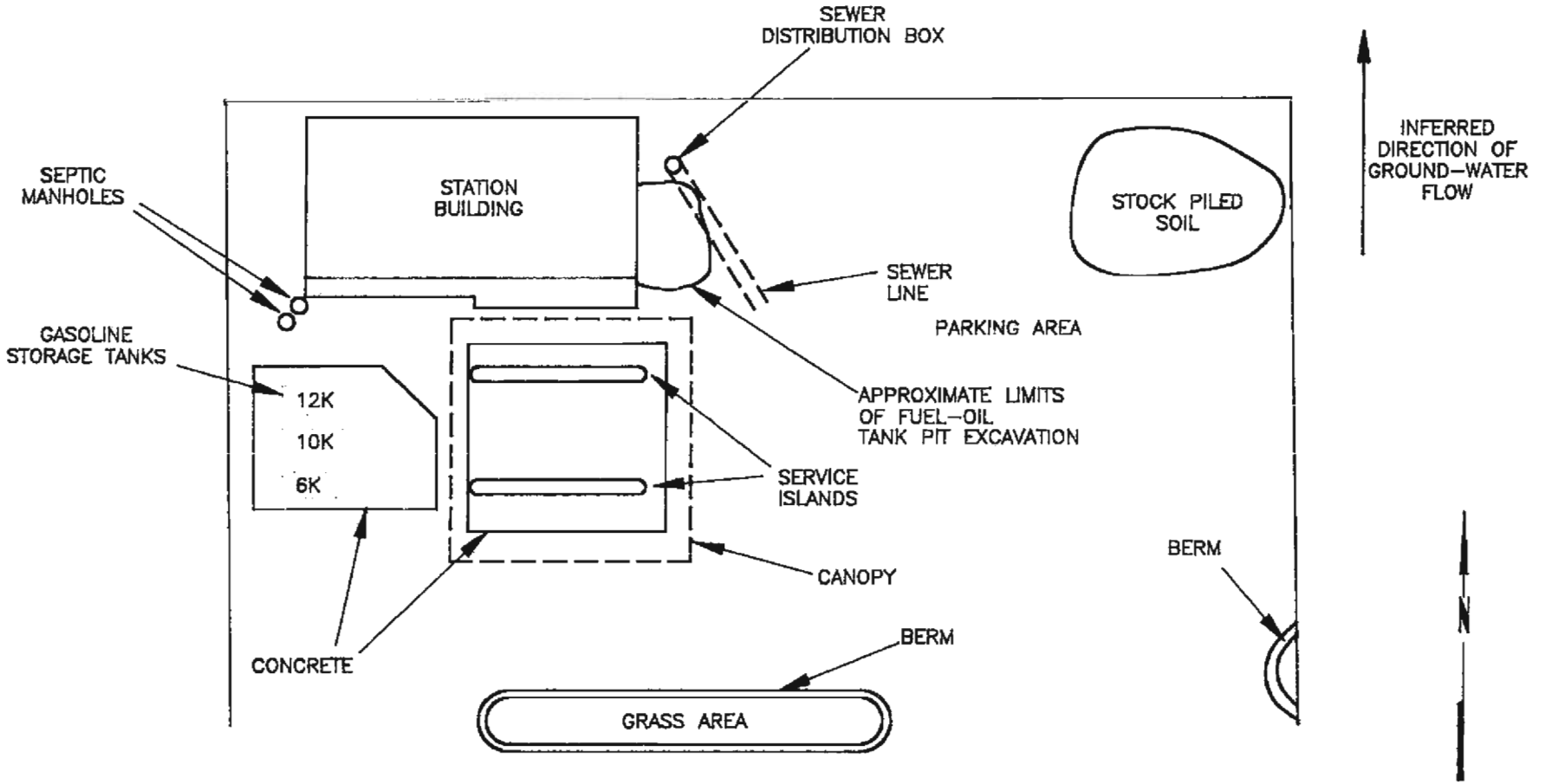
The Disposal Site boundaries encompass portions of the source property as well as impacted downgradient/cross gradient parcels 151-13, 1151-4, 151-14A, and 151-14B, as identified on the Town of Andover tax map #151 and Figure 3. These parcels are occupied by an undeveloped residential property (parcel 13), a golf course and driving range (parcel 14), an apartment complex (parcel 14A), and an athletic club (parcel 14B).

Timeline: key Regulatory Dates
MassDEP RTN 3-3072 and
Related RTNs 3-13955, 3-21062, 3-22521, and 3-32096

November 13, 1989	Gasoline related petroleum constituents detected in soil and groundwater during UST removal.
January 9, 1990	Phase I Limited Site Investigation completed by Applied Geosystems, Inc. MassDEP RTN 3-3072 assigned to the Site at that time.
March 31, 1992	Site classified as a Tier II Disposal Site.
June 29, 1996	IRA activities initiated following a release of gasoline from a gasoline UST flex connector. RTN 3-13955 assigned to the release condition at that time.
March 26, 1998	IRA Completion Report submitted to MassDEP by GES for RTN 3-13955, which was linked to RTN 3-3072 at that time.
May 1998	SRM condition identified relative to an increase of MTBE concentrations in groundwater. Subsequent IRA activities were conducted at the Site under RTN 3-3072.
September 10, 2001	MassDEP RTN 3-21062 issued to the Site following notification of the detection of greater than 0.5 inches of LNAPL in monitoring well MW-2. IRA activities were conducted which including hand bailing of LNAPL and an evaluation of potential LNAPL migration pathways.
November 15, 2001	An IRA Completion report for RTN 3-21062 was filed with MassDEP, at which time RTN 3-21062 was linked to RTN 3-3072.
October 3, 2002	PCBs were detected in a soil sample collected from a depth range of 6 to 8 feet bgs at a concentration exceeding the MCP RCS-1 Reportable Concentration for that parameter during the performance of subsurface investigation activities. The PCB detection was subsequently reported to MassDEP on January 27, 2003 and MassDEP issued RTN 3-22521 to the condition at that time.
July 30, 2003	MassDEP RTN 3-22521 linked to RTN 3-3072.
October 28, 2003	Phase II Comprehensive Site Assessment submitted to MassDEP by GES.
December 21, 2003	Notice of Noncompliance (NON) issued to Exxon Mobil for failure to submit a Phase III RAP, Phase IV RIP, and a RAO Statement by their respective MCP deadlines. The NON required a RAO Statement or Phase III/Phase IV/ROS Opinion be submitted to MassDEP on or before September 1, 2004. CDM becomes the consultant of record for the Site.
February 13, 2004	Tier II Extension submitted by CDM to continue response actions at the Site.

April 1, 2004	Phase III RAP submitted to MassDEP by CDM.
April 13, 2004	A URAM Plan was submitted to MassDEP by Groundwater & Environmental Services, Inc. (GES) for the replacement of a damaged section of an underground sanitary sewer line on the undeveloped residential property (Map 151, Lot 13) east of the Mobil Station property.
August 7, 2004	A Phase IV RIP, an IRA Completion Statement (treatment system was previously operated as an IRA), and a ROS Opinion were submitted to MassDEP by CDM.
August 11, 2004	A URAM Completion Statement was submitted to MassDEP by GES. The affected sewer line was repaired using non-intrusive methods and no URAM activities were completed.
March 30, 2007	The groundwater recovery/AS/SVE treatment system is shut down and the MNA program is implemented at the Site under ROS.
September 2010	Global Companies LLC acquires property, and ECS becomes the consultant of record for the Disposal Site.
April 8, 2014	ECS submitted a RAM Plan for the proposed Site upgrade activities which included the excavation and removal of three gasoline USTs and installation of two new USTs in their place and the replacement of one of the fuel dispensers.
April 10, 2014	A 72-hour reportable condition was encountered when greater than 100 ppm TOVs was detected in soil samples collected in the immediate vicinity of the on-site USTs during UST removal and replacement activities. RTN 3-32096 was assigned to the condition.
April 2014	During the completion of the UST removal and soil excavation activities, a total of 756 tons of petroleum-impacted soil was transported off-site to Aggregate Recycling Corporation of Eliot, Maine. During excavation activities, a total of 60,700 gallons of groundwater was extracted from the UST grave, treated, and discharged to the municipal sewer system. Additionally, approximately 9,000-gallons of water was transported off-site to Newstream LLC of Attleboro, Massachusetts for treatment and disposal.
July 23, 2014	RTN 3-32096 was linked to RTN 3-3072 with the submittal of an IRA Completion Report.

APPENDIX D
HISTORIC FIGURES AND TABLES



12K = Capacity of storage tanks

Approximate Scale

30 15 0 30 60

feet

Source: Measured by tape and compass
Applied GeoSystems (Janurary 8, 1990)

PLATE	SCHEMATIC SITE PLAN Mobil Station No. 01-252 309 Lowell Street Andover, Massachusetts	Applied GeoSystems
P - 2		PROJECT NO. 89033-1

SOURCE:

EXISTING CONDITIONS PLAN, MHF DESIGN CONSULTANTS, SEPTEMBER, 20, 1999.

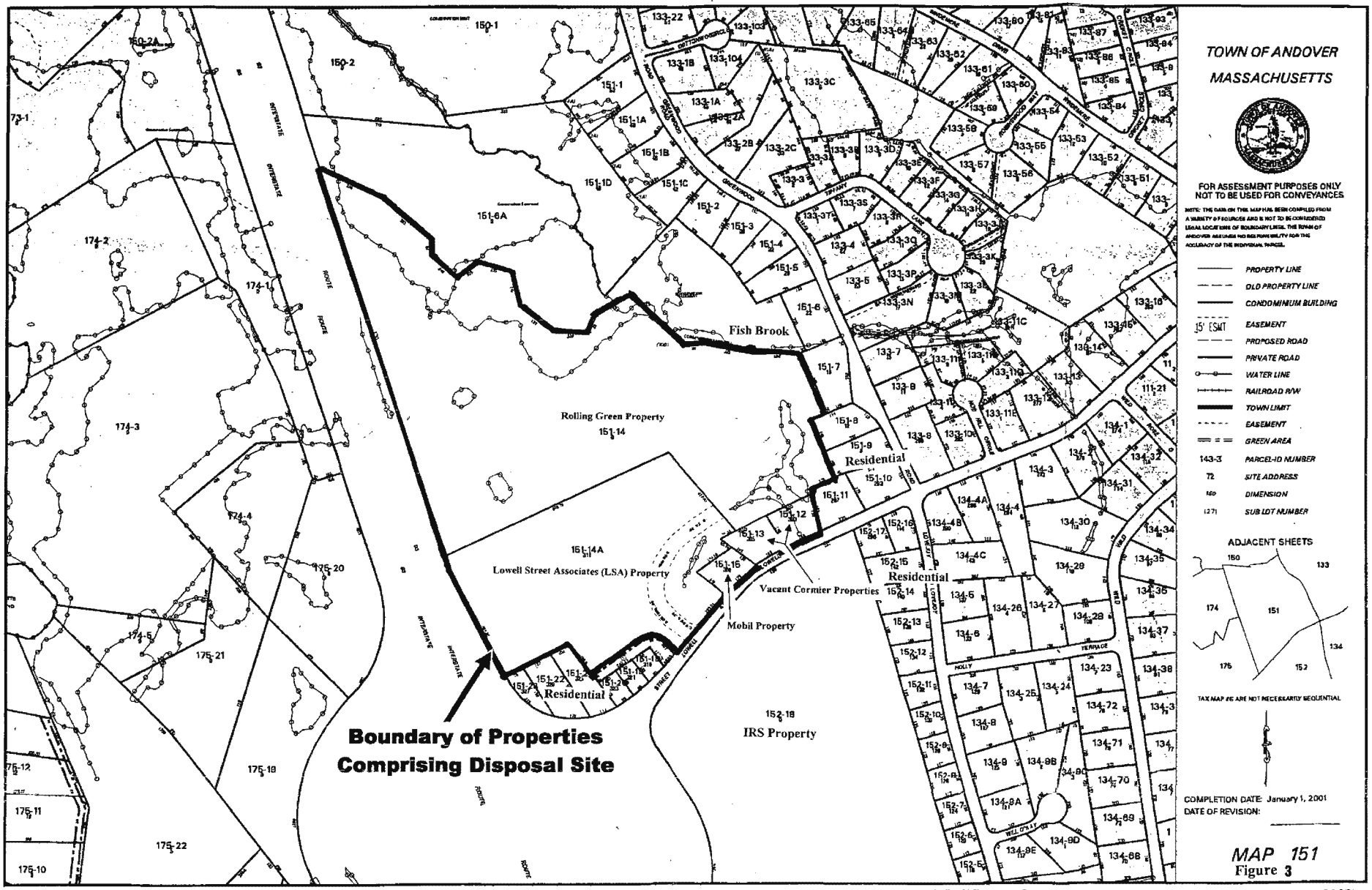
MONITORING WELL PLAN OF LAND, HANCOCK SURVEY ASSOCIATES, OCTOBER 17, 2002, REVISED NOVEMBER 1, 2002.

USGS AERIAL PHOTOGRAPH, TERRASERVER, APRIL, 1998.

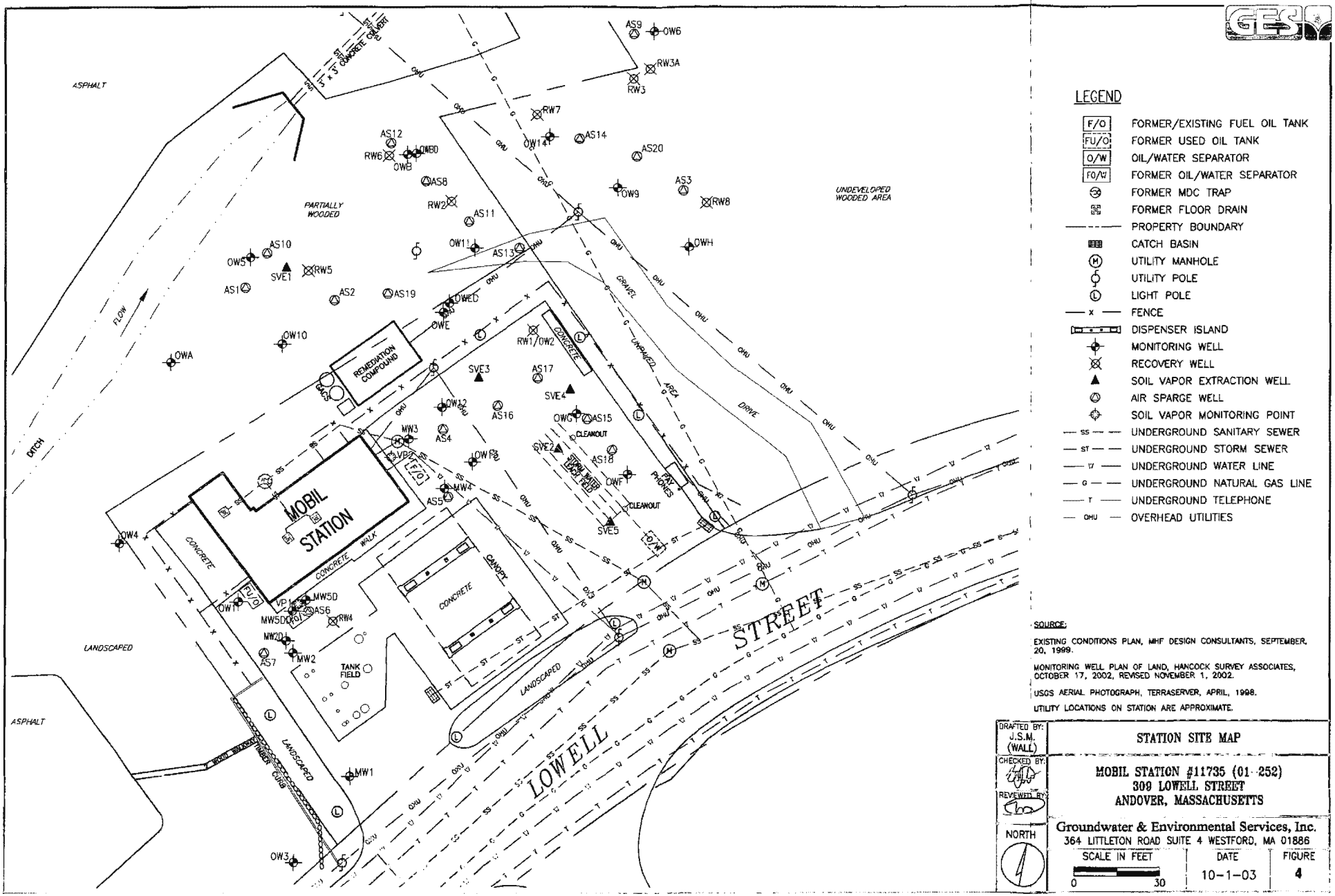
UTILITY LOCATIONS ON STATION ARE APPROXIMATE.

DRAFTED BY: J.S.M. (WALL)	SITE MAP		
CHECKED BY:	MOBIL STATION #11735 (01-252) 309 LOWELL STREET ANDOVER, MASSACHUSETTS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886		
NORTH	SCALE IN FEET 0 80	DATE 9-30-03	FIGURE 2

M:\Graphics\11800 Mobil Stations\Mobil01\ 252 Andover\CH 2K3 andover SM.dwg, C 8½, 09/30/2003 03:27:27 PM, JWall, 1:1, DEB



(Modified by Groundwater & Environmental Services, Inc.; 2003)



LEGEND

- F/O — FORMER/EXISTING FUEL OIL TANK
- FU/O — FORMER USED OIL TANK
- O/W — OIL/WATER SEPARATOR
- FO/W — FORMER OIL/WATER SEPARATOR
- FORMER MDC TRAP
- FORMER FLOOR DRAIN
- PROPERTY BOUNDARY
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FENCE
- DISPENSER ISLAND
- MONITORING WELL
- RECOVERY WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- SOIL VAPOR MONITORING POINT
- SS — UNDERGROUND SANITARY SEWER
- ST — UNDERGROUND STORM SEWER
- W — UNDERGROUND WATER LINE
- G — UNDERGROUND NATURAL GAS LINE
- T — UNDERGROUND TELEPHONE
- OHU — OVERHEAD UTILITIES

SOURCE:

EXISTING CONDITIONS PLAN, MHF DESIGN CONSULTANTS, SEPTEMBER, 20, 1999.

MONITORING WELL PLAN OF LAND, HANCOCK SURVEY ASSOCIATES, OCTOBER 17, 2002, REVISED NOVEMBER 1, 2002.

USGS AERIAL PHOTOGRAPH, TERRASERVER, APRIL, 1998.

UTILITY LOCATIONS ON STATION ARE APPROXIMATE.

DRAFTED BY: J.S.M. (WALL)
CHECKED BY:
REVIEWED BY:
NORTH

STATION SITE MAP

MOBIL STATION #11735 (01-252)
309 LOWELL STREET
ANDOVER, MASSACHUSETTS

Groundwater & Environmental Services, Inc.
364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886

SCALE IN FEET	DATE	FIGURE
0 30	10-1-03	4

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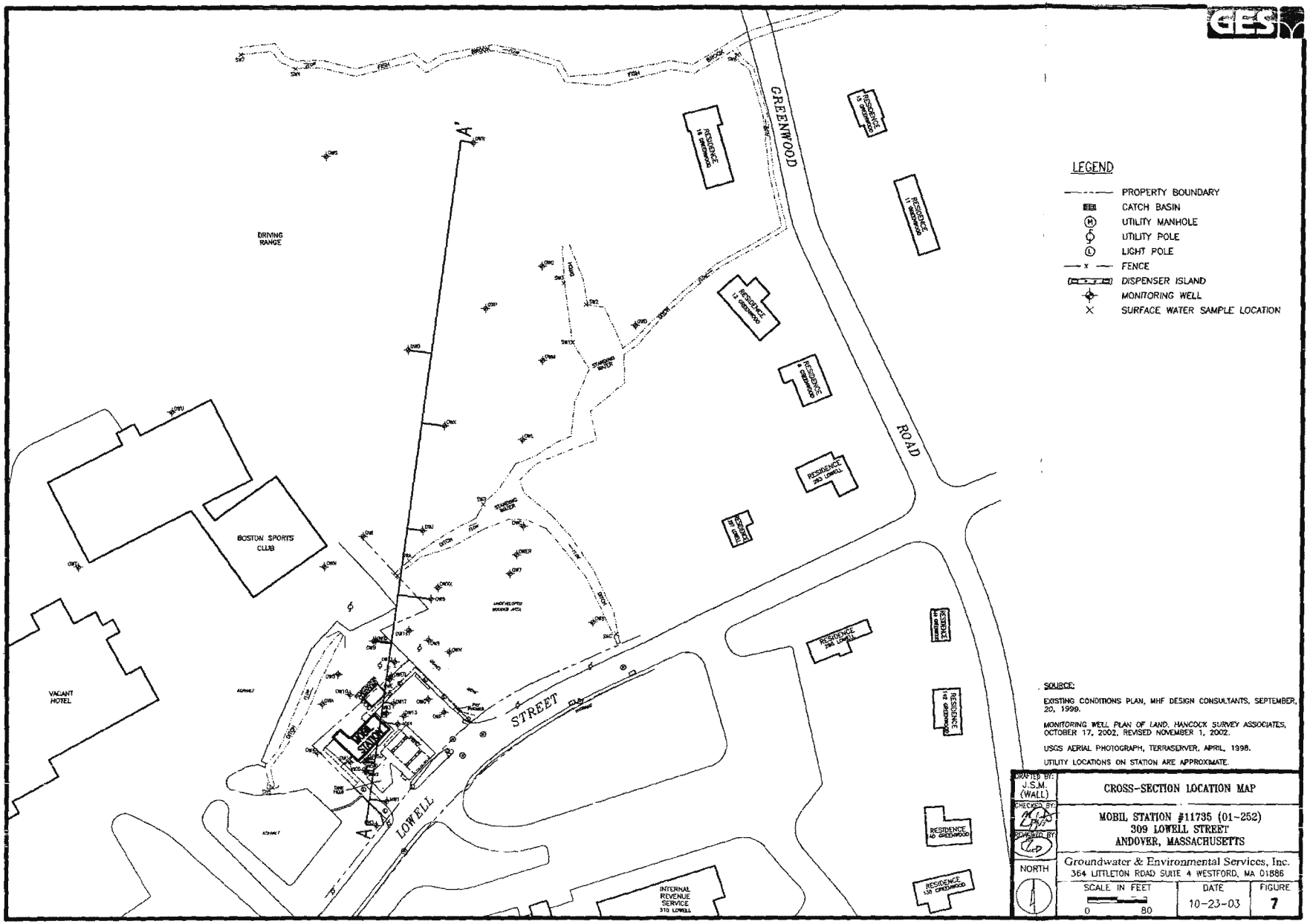
GREENWOOD ROAD
LOWELL STREET
FISH BROOK
DRIVING RANGE
BOSTON SPORTS CLUB
VACANT HOTEL
MOBIL STATION
INTERNAL REVENUE SERVICE 310 LOWELL
RESIDENCE 10 GREENWOOD
RESIDENCE 11 GREENWOOD
RESIDENCE 12 GREENWOOD
RESIDENCE 8 GREENWOOD
RESIDENCE 253 LOWELL
RESIDENCE 249 LOWELL
RESIDENCE 14 GREENWOOD
RESIDENCE 140 GREENWOOD
RESIDENCE 138 GREENWOOD
LEGEND
PROPERTY BOUNDARY
CATCH BASIN
UTILITY MANHOLE
UTILITY POLE
LIGHT POLE
FENCE
DISPENSER ISLAND
MONITORING WELL
SURFACE WATER SAMPLE LOCATION
GROUNDWATER CONTOUR (feet)
SOURCE:
EXISTING CONDITIONS PLAN, MHF DESIGN CONSULTANTS, SEPTEMBER 20, 1999.
MONITORING WELL PLAN OF LAND, HANCOCK SURVEY ASSOCIATES, OCTOBER 17, 2002, REVISED NOVEMBER 1, 2002.
USGS AERIAL PHOTOGRAPH, TERRASERVER, APRIL, 1998.
UTILITY LOCATIONS ON STATION ARE APPROXIMATE.
DRAWN BY: J.S.M. (WALL)
CHECKED BY:
REVIEWED BY:
NORTH
GROUNDWATER CONTOUR MAP
OCTOBER 2, 2002
MOBIL STATION #11735 (01-252)
309 LOWELL STREET
ANDOVER, MASSACHUSETTS
Groundwater & Environmental Services, Inc.
364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886
SCALE IN FEET
0 80
DATE
9-30-03
FIGURE
6



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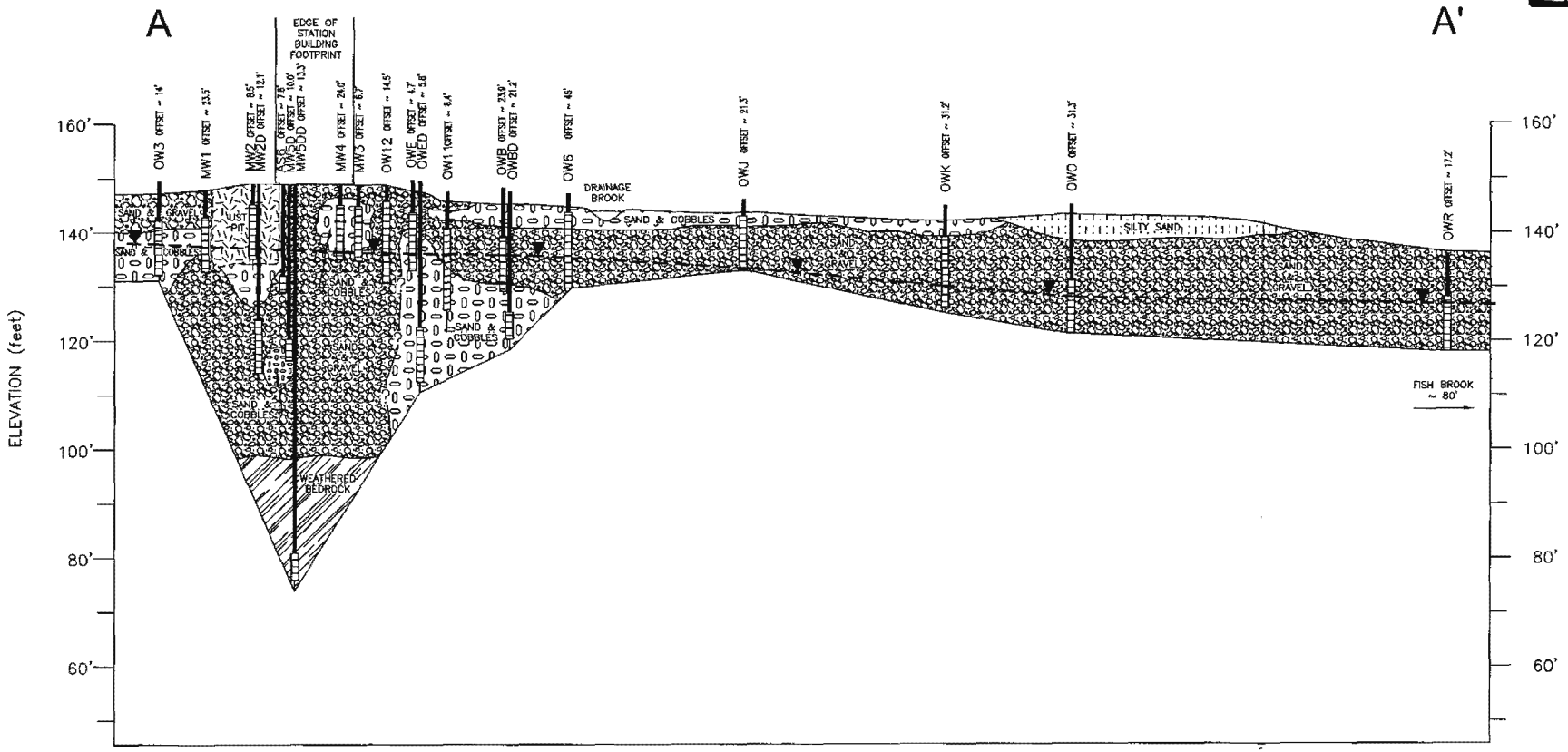


LEGEND

RISER

SCREENED INTERVAL

BORE HOLE

STATIC WATER LEVEL (OCTOBER 2, 2002)

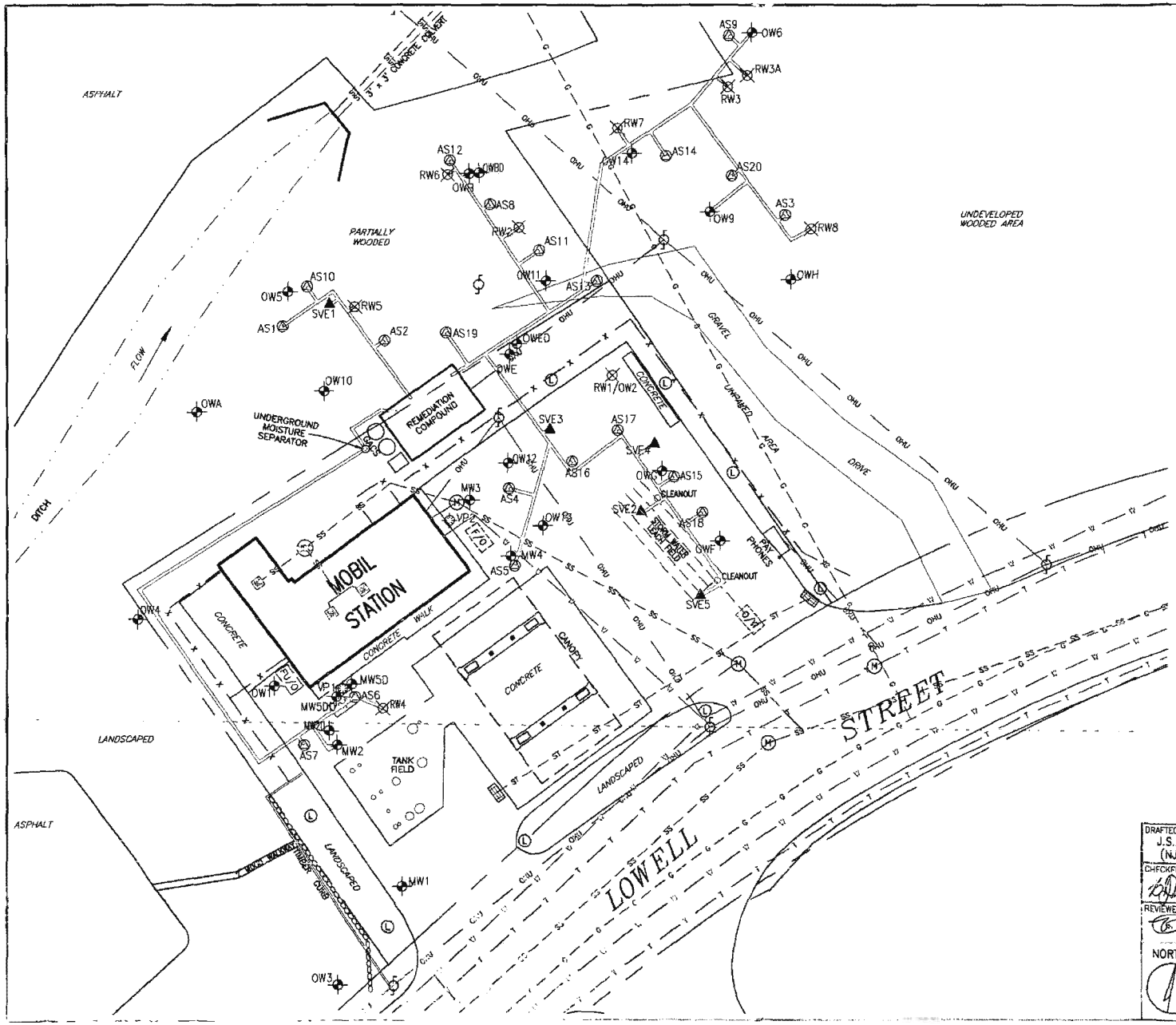
NOTES:

THIS CROSS-SECTION IS INTENDED TO REPRESENT GENERAL SITE CONDITIONS. LOCATIONS OF PROMINENT SITE FEATURES ARE APPROXIMATED AND GENERAL LITHOLOGY IS ESTIMATED FROM MULTIPLE BORING LOGS.

SCREENED INTERVAL FOR WELL OWJ IS ESTIMATED.

DRAFTED BY: J.S.M. (NJ)	CROSS-SECTION A-A'
CHECKED BY:	MOBIL STATION #11735 (01-252) 309 LOWELL STREET ANDOVER, MASSACHUSETTS
REVIEWED BY:	Groundwater & Environmental Services, Inc. 364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886
	SCALE: HORIZONTAL 1" = 80', VERTICAL 1" = 20' | DATE: 10-27-03 | FIGURE: 8

N:\Graph-cs\15QC-Westford\Mobil\01-252 Andover\01-252 andover XS A-A.dwg, Model, 10/27/2003 04:00:22 PM, JMaul, 1:1, GES



LEGEND

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- FORMER FLOOR DRAIN
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- UNDERGROUND STORM SEWER
- UNDERGROUND WATER LINE
- UNDERGROUND NATURAL GAS LINE
- UNDERGROUND TELEPHONE
- OVERHEAD UTILITIES
- REMEDIAL SYSTEM TRENCH

SOURCE:

EXISTING CONDITIONS PLAN, MHF DESIGN CONSULTANTS, SEPTEMBER 20, 1999.

MONITORING WELL PLAN OF LAND, HANCOCK SURVEY ASSOCIATES, OCTOBER 17, 2002, REVISED NOVEMBER 1, 2002.

USGS AERIAL PHOTOGRAPH, TERRASERVER, APRIL, 1998.

UTILITY LOCATIONS ON STATION ARE APPROXIMATE.

DRAFTED BY: J.S.M. (NJ)
CHECKED BY:
REVIEWED BY:
NORTH

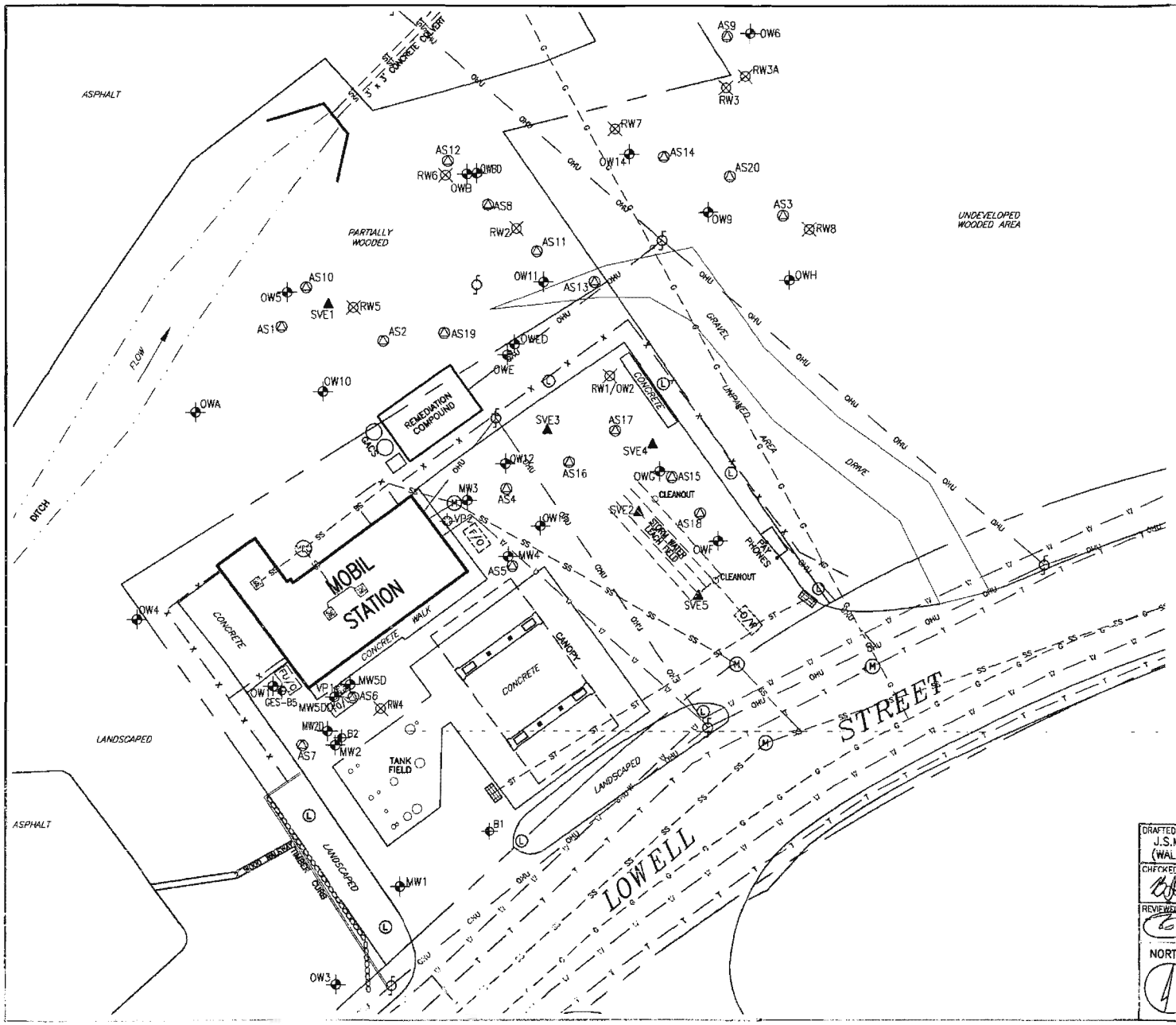
REMEDIAL SYSTEM LAYOUT

MOBIL STATION #11735 (01-252)
309 LOWELL STREET
ANDOVER, MASSACHUSETTS

Groundwater & Environmental Services, Inc.
364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886

SCALE IN FEET	DATE	FIGURE
0 — 30	10-20-03	9

M:\Graphics\1800-Weston\Mobil\01-252 Andover\01-252 andover SM.dwg, B-30, 10/20/2003 10:00:00 AM, JMaul, 1:1, GES



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- G — UNDERGROUND NATURAL GAS LINE
- T — UNDERGROUND TELEPHONE
- OHU — OVERHEAD UTILITIES
- SOIL BORING

SOURCE:

EXISTING CONDITIONS PLAN, MHF DESIGN CONSULTANTS, SEPTEMBER, 20, 1999.

MONITORING WELL PLAN OF LAND, HANCOCK SURVEY ASSOCIATES, OCTOBER 17, 2002, REVISED NOVEMBER 1, 2002.

USGS AERIAL PHOTOGRAPH, TERRASERVER, APRIL, 1998.

UTILITY LOCATIONS ON STATION ARE APPROXIMATE.

DRAFTED BY: J.S.M. (WALL)	**SOIL SAMPLE LOCATION MAP**
CHECKED BY:	**MOBIL STATION #11735 (01-252)** **309 LOWELL STREET** **ANDOVER, MASSACHUSETTS**
REVIEWED BY:	**Groundwater & Environmental Services, Inc.** 364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886
NORTH	SCALE IN FEET: 0 — 30 / DATE: 10-1-03 / FIGURE: 10

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[EXXONMOBIL REFINING AND SUPPLY - MA GAS STATIONS]
Filename: O:\20474\32302\01-252\FIG00004.DWG Xref's: [] Plotted by: CONTRERASF Time: 7/30/2004 3:30:14 PM

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. BOULDIN
DRAWN BY: F. CONTRERAS
SHEET CHK'D BY: B. MACDONALD
CROSS CHK'D BY:
APPROVED BY:
DATE: JANUARY 2004

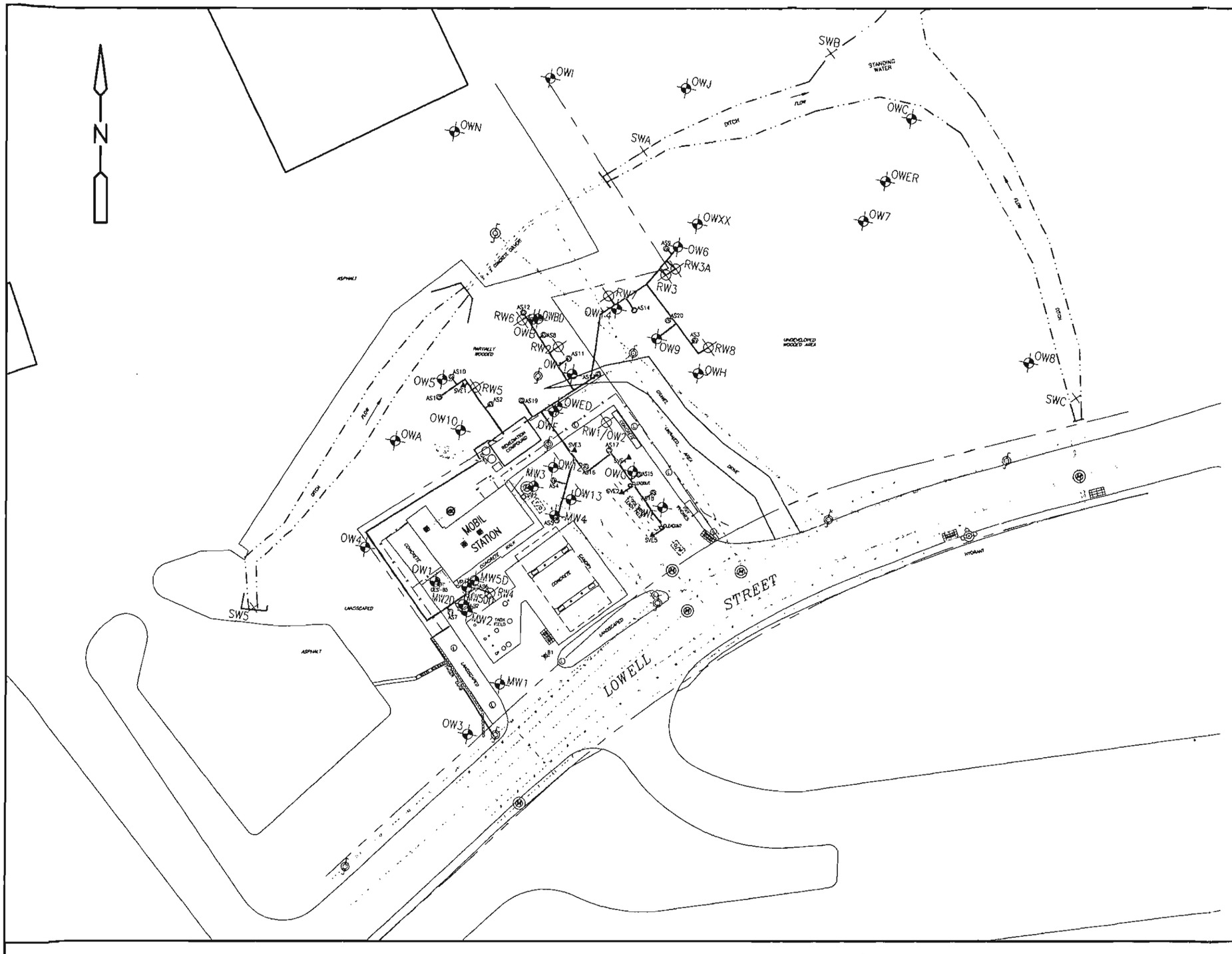
CDM Camp Dresser & McKee Inc.

MOBIL SERVICE STATION #11735 (FORMERLY 01-252)
309 LOWELL STREET
ANDOVER, MASSACHUSETTS

SITE PLAN WITH GROUNDWATER CONTOURS

PROJECT NO.
FILE NAME:

SHEET NO.
2



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- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FENCE
- DISPENSER ISLAND
- MONITORING WELL
- RECOVERY WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- SOIL VAPOR MONITORING POINT
- SOIL BORING
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- UNDERGROUND STORM SEWER
- UNDERGROUND WATER LINE
- UNDERGROUND NATURAL GAS LINE
- UNDERGROUND TELEPHONE
- OVERHEAD UTILITIES
- REMEDIAL SYSTEM TRENCH

UTILITY LOCATIONS ON STATION ARE APPROXIMATE.

1" = 120'

60 0 120

MOBIL SERVICE STATION #11735 (FORMERLY 01-252)
309 LOWELL STREET
ANDOVER, MASSACHUSETTS

SITE PLAN

CDM

FIGURE-3

Q:\20474\32302\01-252\FIG00002.DWG

GROUNDWATER & ENVIRONMENTAL SERVICES, I

FISH BROOK

SW-7 SW-4 SW-5 SW-6 SW-1 SW-2 SW-3 SW-A SW-B SW-C

OW-S OW-R OW-G OW-P OW-Q OW-K OW-N OW-I OW-J OW-M OW-O OW-L OW-A OW-BD OW-10 OW-4 OW-E OW-9 OW-H OW-7 OW-C OW-F OW-6

AS-1 AS-2 AS-8 AS-9 AS-3 AS-4 AS-5 AS-6

SVE-1 RW-2 RW-3 RW-1

MW-3 MW-4 MW-2 MW-1 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12 MW-13

SB1 SB2 SB3

STATION BUILDING

GROUNDWATER REMEDIATION TREATMENT SYSTEM SHED/ENCLOSURE

TREATED GROUNDWATER DISCHARGE

UST AREA

UNDEVELOPED ADJOINING PROPERTY

TREE LINE

WETLAND

RACKET CLUB

RESIDENCE

RESIDENCE

RESIDENCE

UNITED STATES DEPARTMENT OF THE TREASURY BUILDING

GREENWOOD LANE

LOWELL STREET

LEGEND

- MONITORING WELL
- RECOVERY WELL
- VAPOR EXTRACTION WELL
- SPARGE POINT
- INJECTION WELL
- SURFACE WATER SAMPLE
- F/O UNDERGROUND FUEL OIL STORAGE TANK
- CATCH BASIN
- UTILITY MANHOLE
- PUMP ISLAND

NOTES:

THIS PLAN WILL BE UPDATED FOLLOWING AN UPCOMING SURVEY AT THE SITE (TO BE INCLUDED IN THE PHASE II REPORT).

LOCATIONS OF SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

SITE PLAN

SERVICE STATION #11735

MOBIL SERVICE STATION
309 LOWELL STREET
ANDOVER, MASSACHUSETTS

NORTH	SCALE IN FEET	DATE	SOURCE
	0 50 100	8-13-02	MASS
		DWG # 01-252	FIGURE 2

M:\Graphics\Graphics-Westford\Mobil\01-252 Andover\01-252 andover site plan.dwg, Model, 08/13/2002 08:48:43 AM, JMaul, 1:1200, GES

Table 2. Summary of Soil Analytical Data: VPH and Targets, VOCs, EPH and Targets, TPH, Total Metals, PCBs and EDB

(November 16, 1989 to February 4, 2003)

Mobil Station No. 11735 (formerly 01-252)

309 Lowell Street

Andover, Massachusetts

MADEP Site No. 3-3072 and Linked RTNs 3-13955, 3-21062 and 3-22521

	Applied Geosystems - Fuel Oil UST Excavation (1989)					Applied Geosystems - Phase I (1990)				International Technology Corporation - (1990)										MCP Method 1 Soil Standards								
Sample ID:	North Wall	South Wall	East Wall	West Wall	Center/Bottom	MW-1	MW-2	MW-3	MW-4	OW-1	OW-2	OW-3	OW-4	OW-5	OW-6	OW-7	OW-8	OW-9	OW-F	S-1/ GW-1	S-1/ GW-2	S-1/ GW-3	S-2/ GW-1	S-2/ GW-2	S-2/ GW-3	S-3/ GW-1	S-3/ GW-2	S-3/ GW-3
Collection Date:	11/16/89	11/16/89	11/16/89	11/16/89	11/16/89	01/16/90	01/16/90	01/16/90	01/16/90	03/26/90	03/26/90	03/26/90	03/26/90	03/26/90	03/27/90	03/27/90	03/27/90	03/27/90	05/07/90									
Location/Depth (ft bgs):	6'	6'	8'	8'	10'	5 - 6.5'	4.5 - 6'	4.5 - 6'	4.5 - 6'	15-16.5'	15-16.5'	15-16.5'	5-6.5'	10-11.5'	10-11.5'	5-6'	5-6.5'	5-6.5'	7-7.5'									
PID Reading (ppmv):	NR	NR	NR	NR	NA	720	9	6	3	1.7	45	1	ND	3.6	8.6	ND	2.1	23	ND									
Applicable Method 1 Soil Standard:	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3									
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VPH and Target VOCs																												
C5-C8 Aliphatics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	100	100	500	500	500	500	500	500
C9-C12 Aliphatics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
C9-C10 Aromatics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	100	100	100	500	500	100	500	500
Benzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	40	40	10	60	60	10	100	200
Toluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	90	500	500	90	500	1,000	90	500	2,500
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	80	500	500	80	1,000	500	80	2,500	500
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	500	500	500	800	500	1,000	800	500	2,500
MTBE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3	100	100	0.3	200	200	0.3	200	200
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	100	100	4	1,000	1,000	4	1,000	1,000
VOCs - EPA Methods 8240/8260B																												
Benzene	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.002	0.7	<0.002	<0.002	<0.002	0.006	<0.002	<0.002	<0.002	<0.002	10	40	40	10	60	60	10	100	200
Toluene	<0.3	<0.3	<0.3	6.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.002	5.2	0.012	<0.002	<0.002	0.032	0.016	0.014	0.026	<0.002	90	500	500	90	500	1,000	90	500	2,500
Ethylbenzene	<0.36	<0.5	<0.5	<0.5	<0.5	<0.36	<0.36	<0.36	<0.36	<0.002	4.4	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	80	500	500	80	1,000	500	80	2,500	500
Xylenes (total)	<0.5	<0.5	12	23	20	<0.5	<0.5	<0.5	<0.5	<0.002	21.8	0.018	<0.002	<0.002	0.026	<0.002	<0.002	<0.002	0.007	500	500	500	800	500	1,000	800	500	2,500
MTBE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3	100	100	0.3	200	200	0.3	200	200
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
Other VOCs were below detectable limits	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	--	ND	ND	ND	ND	*	*	*	*	*	*	*	*	*
EPH and Target PAHs																												
C9-C18 Aliphatics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
C19-C36 Aliphatics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,500	2,500	2,500	5,000	5,000	5,000	5,000	5,000	5,000
C11-C22 Aromatics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	200	800	800	200	2,000	2,000	200	5,000	5,000
2-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	500	500	4	1,000	1,000	4	2,000	1,000
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	100	100	4	1,000	1,000	4	1,000	1,000
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	700	1,000	100	700	2,500	100	700	2,500	100
Fluoranthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,000	2,000	1,000	2,000	5,000	1,000
Benzo(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7	0.7	0.7	1	1	1	4	4	4
Benzo(a)pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Benzo(b)fluoranthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7	0.7	0.7	1	1	1	4	4	4
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	2,500	2,500	2,500
Benzo(k)fluoranthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	7	7	10	10	10	40	40	40
Chrysene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	7	7	10	10	10	40	40	40
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7	0.7	0.7	1	1	1	4	4	4
Pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	700	700	700	1,000	2,000	2,000	1,000	5,000	5,000
Other PAHs were below detectable limits	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	*	*	*	*	*	*	*	*
TPH/TR - EPA Method 503BCE	52	51	714	259	161	--	--	1,410	--	--	--	--	--	--	--	--	--	--	<40	200	800	800	200	2,000	2,000	200	5,000	5,000
Total Metals																												
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20	20	20	60	60	60	60	60	60
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	30	30	80	80	80	80	80	80
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	300	300	300	600	600	600	600	600	600
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	100	100	200	200	200	200	200	200
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	30	30	30	30	30	30	30	30
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	400	400	400	2,500	2,500	2,500	2,500	2,500	2,500
PCBs (Total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2	2	2	2	2	2	2	2
Ethylene Dibromide	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	--	--	--	--	--	--	--	--	--	--	0.005	0.01	0.01	0.005	0.02	0.02	0.005	0.04	0.07

Notes

1 Concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

2 Select soil samples analyzed for volatile petroleum hydrocarbons (VPH), volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), polynuclear aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), and total metals

3 Italicized values indicate laboratory detection limits are greater than the applicable MCP Method 1 soil standards

4 -- Not analyzed

5 ND Not detected

6 NA - Not applicable

Exceedences of the MCP Method 1S-1 Soil Standards are shown UNDERLINED

Exceedences of the MCP Method 1 S-2 Soil Standards are shown BOLD.

Exceedences of the MCP Method 1 S-3 Soil Standards are shown SHADED

Table 2. Summary of Soil Analytical Data: VPH and Targets, VOCs, EPH and Targets, TPH, Total Metals, PCBs and EDB
(November 16, 1989 to February 4, 2003)
Mobil Station No. 11735 (formerly 01-252)
309 Lowell Street
Andover, Massachusetts
MADEP Site No. 3-3072 and Linked RTNs 3-13955, 3-21062 and 3-22521

	Groundwater & Environmental Services - (1998-1999)													MCP Method 1 Soil Standards								
Sample ID	AS-6	AS-6	AS-7	B-1	B-2	OW-12	OW-13	OW-K	OW-L	OW-M	OW-N	OW-O	OW-P	S-1/	S-1/	S-1/	S-2/	S-2/	S-2/	S-3/	S-3/	S-3/
Collection Date	05/30/98	05/30/98	05/30/98	05/03/99	05/03/99	05/03/99	05/03/99	06/14/99	06/14/99	06/14/99	08/16/99	08/16/99	08/16/99	GW-1	GW-2	GW-3	GW-1	GW-2	GW-3	GW-1	GW-2	GW-3
Location/Depth (ft bgs)	10-11'	15-16.5'	10-12'	7-9'	5-7'	9-11'	9-13'	5-7'	5-7'	5-7'	5-7'	15-17'	10-12'									
PID Reading (ppmv)	380	499	ND	0.8	274	352	286-781	2.5	ND	ND	ND	ND	ND									
Applicable Method 1 Soil Standard	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3									
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VPH and Target VOCs																						
C5-C8 Aliphatics	**1,570**	192	<1.3	<1.0	<1.0	<1.0	16.6	<6.0	<5.9	<5.6	<5.4	<5.4	<5.3	100	100	100	500	500	500	500	500	500
C9-C12 Aliphatics	2,180	164	<1.3	<1.0	2.6	1.4	109	<6.0	<5.9	<5.6	<5.4	<5.4	<5.3	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
C9-C10 Aromatics	**1,140**	94	<1.3	<1.0	5.6	4.0	63.6	<6.0	<5.9	<5.6	<5.4	<5.4	<5.3	100	100	100	100	500	500	100	500	500
Benzene	<0.92	<0.23	<0.026	<0.021	<0.020	<0.020	<0.063	<0.12	<0.12	<0.11	<0.11	<0.11	<0.11	10	40	40	10	60	60	10	100	200
Toluene	46.2	3.37	<0.026	<0.021	0.1	<0.020	0.149	<0.12	<0.12	<0.11	<0.11	<0.11	<0.11	90	500	500	90	500	1,000	90	500	2,500
Ethylbenzene	**80**	5.5	<0.026	<0.021	0.03	0.026	1.12	<0.12	<0.12	<0.11	<0.11	<0.11	<0.11	80	500	500	80	1,000	500	80	2,500	500
Xylenes (total)	**523**	37.87	<0.079	<0.062	0.501	0.082	4.64	<0.024	<0.024	<0.22	<0.22	<0.22	<0.22	500	500	500	800	500	1,000	800	500	2,500
MTBE	**4.8**	2.86	<0.066	<0.051	**0.7**	0.098	<0.16	<0.12	<0.12	<0.11	<0.11	<0.11	<0.11	0.3	100	100	0.3	200	200	0.3	200	200
Naphthalene	535	3.6	<0.066	<0.051	0.18	0.154	0.53	<0.12	<0.12	<0.11	<0.11	<0.11	<0.11	4	100	100	4	1,000	1,000	4	1,000	1,000
VOCs - EPA Methods 8240/8260B																						
Benzene	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	10	40	40	10	60	60	10	100	200
Toluene	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	90	500	500	90	500	1,000	90	500	2,500
Ethylbenzene	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	80	500	500	80	1,000	500	80	2,500	500
Xylenes (total)	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	500	500	500	800	500	1,000	800	500	2,500
MTBE	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3	100	100	0.3	200	200	0.3	200	200
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
n-Prepylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
1,2,4-Trimethylbenzeoc	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
Other VOCs were below detectable limits	--	--	--	--	ND	--	--	--	--	--	--	--	--	*	*	*	*	*	*	*	*	*
EPH and Target PAHs																						
C9-C18 Aliphatics	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
C19-C36 Aliphatics	--	--	--	--	6.6	--	--	--	--	--	--	--	--	2,500	2,500	2,500	5,000	5,000	5,000	5,000	5,000	5,000
C11-C22 Aromatics	--	--	--	--	6.3	--	--	--	--	--	--	--	--	200	800	800	200	2,000	2,000	200	5,000	5,000
2-Methylnaphthalene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	4	500	500	4	1,000	1,000	4	2,000	1,000
Naphthalene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	4	100	100	4	1,000	1,000	4	1,000	1,000
Phenanthrene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	700	1,000	100	700	2,500	100	700	2,500	100
Fluoranthene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,000	2,000	1,000	2,000	5,000	1,000
Benzo(a)anthracene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	0.7	0.7	0.7	1	1	1	4	4	4
Benzo(a)pyrene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Benzo(b)fluoranthene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	0.7	0.7	0.7	1	1	1	4	4	4
Benzo(g,h,i)perylene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	2,500	2,500	2,500
Benzo(k)fluoranthene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	7	7	7	10	10	10	40	40	40
Chrysene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	7	7	7	10	10	10	40	40	40
Indeno(1,2,3-cd)pyrene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	0.7	0.7	0.7	1	1	1	4	4	4
Pyrene	--	--	--	--	<0.5	--	--	--	--	--	--	--	--	700	700	700	1,000	2,000	2,000	1,000	5,000	5,000
Other PAHs were below detectable limits	--	--	--	--	ND	--	--	--	--	--	--	--	--	*	*	*	*	*	*	*	*	*
TPH/IR - EPA Method 503BCE	--	--	--	--	--	--	--	--	--	--	--	--	--	200	800	800	200	2,000	2,000	200	5,000	5,000
Total Metals																						
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	20	20	20	60	60	60	60	60	60
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	30	30	30	80	80	80	80	80	80
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	300	300	300	600	600	600	600	600	600
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	100	100	100	200	200	200	200	200	200
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	30	30	30	30	30	30	30	30	30
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	400	400	400	2,500	2,500	2,500	2,500	2,500	2,500
PCBs (Total)	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2	2	2	2	2	2	2	2
Ethylene Dibromide	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005	0.01	0.01	0.005	0.02	0.02	0.005	0.04	0.07

Notes:
1 Concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm)
2 Select soil samples analyzed for volatile petroleum hydrocarbons (VPH), volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), polynuclear aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), and total metals
3 Italicized values indicate laboratory detection limits are greater than the applicable MCP Method 1 soil standards
4 -- Not analyzed
5 ND Not detected
6 NA Not applicable

Exceedences of the MCP Method 1 S-1 Soil Standards are shown UNDERLINED.
Exceedences of the MCP Method 1 S-2 Soil Standards are shown BOLD.
Exceedences of the MCP Method 1 S-3 Soil Standards are shown SHADED

Table 2. Summary of Soil Analytical Data
(November 16, 1989 to February 4, 2003)
Mobil Station No. 11735 (formerly 01-252)
309 Lowell Street
Andover, Massachusetts
MADEP Site No. 3-3072 and Linked RTNs 3-13955, 3-21062 and 3-22521

	Groundwater & Environmental Services - (2000 & 2002)														MCP Method 1 Soil Standards								
Sample ID:	OW-BD	MW-2D	GES-B5	GES-B5	MW-5D	MW-5D	MW-5D	MW-5D	OW-T	OW-T	OW-U	OW-U	MW-5DD	MW-5DD	VP-1	S-1/	S-1/	S-1/	S-1/	S-2/	S-2/	S-3/	S-3/	S-3/
Collection Date:	10/25/00	10/26/00	09/10/02	09/10/02	09/10/02	09/11/02	09/11/02	09/11/02	09/10/02	09/12/02	09/10/02	09/12/02	02/04/03	02/04/03	02/04/03	GW-1	GW-2	GW-3	GW-1	GW-2	GW-3	GW-1	GW-2	GW-3
Location/Depth (ft bgs):	9-11'	8-12'	2-4'	8'	6-8'	12-14	14-16'	31-33'	2-4'	12-14'	6-8'	14-16'	3-4'	8'	3'									
PID Reading (ppmv):	12 4	607	13.3	7 1	1,074	1,089	1,312	20 9	10 9	0 5	1 9	0.6	6 4	87 6	5 2									
Applicable Method 1 Soil Standard:	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3	S-2/S-3									
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VPH and Target VOCs																								
C5-C8 Aliphatics	<5 6	**4,410**	--	<6.0	71 6	--	**878**	<6 0	<5 7	<5.6	<5.8	<5 5	--	--	--	100	100	100	500	500	500	500	500	500
C9-C12 Aliphatics	<5 6	**6,670**	--	<6 0	179	--	740	<6 0	<5 7	<5.6	<5.8	<5 5	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
C9-C10 Aromatics	<5.6	**420**	--	<6 0	245	--	640	<6.0	<5.7	<5 6	<5.8	<5 5	--	--	--	100	100	100	100	500	500	100	500	500
Benzene	<0 11	<5 6	--	<0 30	<0 23	--	<0 32	<0 30	<0 29	<0 28	<0 29	<0 28	--	--	--	10	40	40	10	60	60	10	100	200
Toluene	<0 11	22 7	--	<0 30	0 916	--	24 1	<0 30	<0 29	<0 28	<0 29	<0 28	--	--	--	90	500	500	90	500	1,000	90	500	2,500
Ethylbenzene	<0 11	**160**	--	<0 30	0 609	--	35 0	<0 30	<0 29	<0 28	<0 29	<0 28	--	--	--	80	500	500	80	1,000	500	80	2,500	500
Xylenes (total)	<0.22	**1,091**	--	<0 60	26 14	--	174 1	<0 60	<0 58	<0.56	<0 58	<0 56	--	--	--	500	500	500	800	500	1,000	800	500	2,500
MTBE	<0 11	<5 6	--	<0 12	0 104	--	**3.66**	<0 12	<0.11	<0 11	<0 12	<0 11	--	--	--	0 3	100	100	0 3	200	200	0 3	200	200
Naphthalene	<0 11	**70.7**	--	<0 30	3 30	--	**20.1**	0 426	<0.29	<0 28	<0 29	<0.28	--	--	--	4	100	100	4	1,000	1,000	4	1,000	1,000
VOCs - EPA Methods 8240/8260B																								
Benzene	--	0 473	--	<0 11	<0 10	--	1 19	<0 11	--	--	--	--	--	--	--	10	40	40	10	60	60	10	100	200
Toluene	--	10	--	<0 11	0 987	--	20 4	<0 11	--	--	--	--	--	--	--	90	500	500	90	500	1,000	90	500	2,500
Ethylbenzene	--	45	--	<0 11	1 36	--	38 2	<0 11	--	--	--	--	--	--	--	80	500	500	80	1,000	500	80	2,500	500
Xylenes (total)	--	360	--	<0 11	32 8	--	278	<0 11	--	--	--	--	--	--	--	500	500	500	800	500	1,000	800	500	2,500
MTBE	--	**2.2**	--	<0 11	<0 10	--	**1.88**	<0 11	--	--	--	--	--	--	--	0.3	100	100	0 3	200	200	0.3	200	200
sec-Butylbenzene	--	--	--	<0 27	0.348	--	<0 29	<0.28	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
Isopropylbenzene	--	--	--	<0 27	<0.26	--	4 10	<0 28	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
p-Isopropyltoluene	--	--	--	<0 27	2 29	--	1 65	<0 28	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
n-Propylbenzene	--	--	--	<0.27	0 714	--	14.3	<0 28	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
1,2,4-Trimethylbenzene	--	--	--	<0 27	32 0	--	115	<0 28	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
1,3,5-Trimethylbenzene	--	--	--	<0 27	13 5	--	35 7	<0 28	--	--	--	--	--	--	--	NE	NE	NE	NE	NE	NE	NE	NE	NE
Other VOCs were below detectable limits	--	--	--	--	ND	--	ND	ND	--	--	--	--	--	--	--	*	*	*	*	*	*	*	*	*
EPH and Target PAHs																								
C9-C18 Aliphatics	--	460	6 97	9 86	289	--	297	7 04	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
C19-C36 Aliphatics	--	170	<8 3	13 1	825	--	188	<9 2	--	--	--	--	--	--	--	2,500	2,500	2,500	5,000	5,000	5,000	5,000	5,000	5,000
C11-C22 Aromatics	--	180	<18	<19	**326**	--	103	<20	--	--	--	--	--	--	--	200	800	800	200	2,000	2,000	200	5,000	5,000
2-Methylnaphthalene	--	31	<0 52	<0 55	**5.38**	--	**9.44**	<0 58	--	--	--	--	--	--	--	4	500	500	4	1,000	1,000	4	2,000	1,000
Naphthalene	--	**36**	<0 52	<0 55	1 96	--	**5.69**	<0 58	--	--	--	--	--	--	--	4	100	100	4	1,000	1,000	4	1,000	1,000
Phenanthrene	--	6 3	<0 52	<0 55	<0 53	--	3 01	<0 58	--	--	--	--	--	--	--	700	1,000	100	700	2,500	100	700	2,500	100
Fluoranthene	--	<5 6	<0 52	0 776	<0 53	--	4 42	<0 58	--	--	--	--	--	--	--	1,000	1,000	1,000	2,000	2,000	1,000	2,000	5,000	1,000
Benzo(a)anthracene	--	<5.6	<0 52	<0 55	<0 53	--	**1.32**	<0 58	--	--	--	--	--	--	--	0 7	0 7	0 7	1	1	1	4	4	4
Benzo(a)pyrene	--	<5 6	<0 52	<0 55	<0 53	--	**1.41**	<0 58	--	--	--	--	--	--	--	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7
Benzo(b)fluoranthene	--	<5.6	<0 52	<0 55	<0 53	--	**1.84**	<0 58	--	--	--	--	--	--	--	0.7	0.7	0 7	1	1	1	4	4	4
Benzo(g,h,i)perylene	--	<5 6	<0.52	<0 55	<0 53	--	0 960	<0 58	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	2,500	2,500	2,500
Benzo(k)fluoranthene	--	<5 6	<0.52	<0 55	<0 53	--	1 05	<0 58	--	--	--	--	--	--	--	7	7	7	10	10	10	40	40	40
Chrysene	--	<5 6	<0 52	<0 55	<0 53	--	1 95	<0 58	--	--	--	--	--	--	--	7	7	7	10	10	10	40	40	40
Indeno(1,2,3-cd)pyrene	--	<5.6	<0 52	<0 55	<0 53	--	**1.01**	<0 58	--	--	--	--	--	--	--	0 7	0 7	0 7	1	1	1	4	4	4
Pyrene	--	<5 6	<0 52	<0 55	<0 53	--	3 10	<0 58	--	--	--	--	--	--	--	700	700	700	1,000	2,000	2,000	1,000	5,000	5,000
Other PAHs were below detectable limits	--	ND	ND	ND	ND	--	ND	ND	--	--	--	--	--	--	--	*	*	*	*	*	*	*	*	*
TPH/IR - EPA Method 503BCE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	200	800	800	200	2,000	2,000	200	5,000	5,000
Total Metals																								
Mercury	--	<0 11	<0.028	0 057	<0.031	<0 032	--	<0 035	--	--	--	--	--	--	--	20	20	20	60	60	60	60	60	60
Barium	--	26 1	<18	<18	24 6	<23	--	449	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
Cadmium	--	<2 2	<0 37	<0.35	<0.41	<0.41	--	<0 35	--	--	--	--	--	--	--	30	30	30	80	80	80	80	80	80
Chromium	--	25 2	15 0	13 7	14 6	23 1	--	28 0	--	--	--	--	--	--	--	1,000	1,000	1,000	2,500	2,500	2,500	5,000	5,000	5,000
Lead	--	36 3	2.2	13 1	35 8	3 8	--	0 67	--	--	--	--	--	--	--	300	300	300	600	600	600	600	600	600
Silver	--	<2 2	<0 46	<0 44	<0 51	<0 51	--	<0 44	--	--	--	--	--	--	--	100	100	100	200	200	200	200	200	200
Arsenic	--	28 2	5 0	7 2	6 8	20 8	--	11 8	--	--	--	--	--	--	--	30	30	30	30	30	30	30	30	30
Selenium	--	<1 1	<0 92	<0 89	<1 0	<1 0	--	<0 89	--	--	--	--	--	--	--	400	400	400	2,500	2,500	2,500	2,500	2,500	2,500
PCBs (Total)	--	--	--	<0 11	**2.136**	--	--	--	--	--	--	--	<0.70	0 694	0 182	2	2	2	2	2	2	2	2	2
Ethylene Dibromide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0 005	0 01	0 01	0 005	0 02	0 02	0 005	0 04	0 07

Notes.

1. Concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm)
2. Select soil samples analyzed for volatile petroleum hydrocarbons (VPH), volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), polynuclear aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), and total metals.
3. Italicized values indicate laboratory detection limits are greater than the applicable MCP Method 1 soil standards
4. -- Not analyzed
5. ND Not detected
6. NA -- Not applicable

Exceedences of the MCP Method 1 S-1 Soil Standards are shown ~~UNDER LINED~~.
Exceedences of the MCP Method 1 S-2 Soil Standards are shown BOLD.
Exceedences of the MCP Method 1 S-3 Soil Standards are shown SHADED

Table 2-4

Summary of Surface Water Monitoring Data

Mobil Station No. 11735, 309 Lowell Street, Andover, MA (RTN 3-3072)

Sample No.	Sampling Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph-thalene (µg/l)	C_5-C_8 Aliphatics (µg/l)	C_9-C_{12} Aliphatics (µg/l)	C_9-C_{10} Aromatics (µg/l)
Ambient Water Quality Criteria in µg/l:		700*	5,000*	430***	NE	7,000*	620*	390**	1,800**	430**
Drinking Water Standards and Guidelines in µg/l:		5(1)	1,000(1)	700(1)	10,000(1)	70(1)	140(1)	400(1)	4,000(1)	200(1)
SW-1	30-Jul-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	11-Sep-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	20-Nov-00	<5.0	<5.0	<5.0	<10	45.2	<5.0	<50	<50	<50
	26-Feb-01	1.3	<5.0	<5.0	<15	51.5	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	7-Sep-01	<5.0	<5.0	<5.0	<10	8.5	<5.0	<50	<50	<50
	5-Nov-01	<0.5	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	7-May-02	<1.0	<1.0	<1.0	<1.0	7.8	NS	NS	NS	NS
	2-Oct-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	*Frozen - No sample could be collected*								
	19-Jun-09	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	22-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
SW-2	30-Jul-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	11-Sep-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	2-Oct-02	*Dry - No sample could be collected*								
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	*Frozen - No sample could be collected*								
	19-Jun-09	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	22-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
SW-3	30-Jul-98	<1.0	<1.0	<1.0	<3	1	NS	NS	NS	NS
	11-Sep-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	26-Oct-98	<1.0	<1.0	<1.0	<3	17	NS	NS	NS	NS
	13-Nov-98	<1.0	<1.0	<1.0	<3	2	NS	NS	NS	NS
	17-Dec-98	<1.0	<1.0	<1.0	<3	2	NS	NS	NS	NS
	9-Feb-99	<1.0	<1.0	<1.0	<3	35	NS	NS	NS	NS
	29-Mar-99	<1.0	<1.0	<1.0	<3	7	NS	NS	NS	NS
	24-Jun-99	<1.0	<5	<5	<15	<5	<5	<100	<100	<100
	4-Nov-99	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	3-Jan-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	25-Feb-00	<1.0	<1.0	<1.0	<3.0	**75**	NS	NS	NS	NS
	1-Mar-00	<1.0	<1.0	<1.0	<3.0	**150**	NS	NS	NS	NS
	14-Apr-00	<1.0	<5.0	<5.0	<15	25.9	<5.0	<100	<100	<100
	20-Nov-00	<5.0	<5.0	<5.0	<10	54.5	<5.0	<50	<50	<50
	2-Oct-02	*Dry - No sample could be collected*								
	13-Nov-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	*Frozen - No sample could be collected*								
	19-Jun-09	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	22-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

Table 2-4

Summary of Surface Water Monitoring Data

Mobil Station No. 11735, 309 Lowell Street, Andover, MA (RTN 3-3072)

Sample No.	Sampling Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph-thalene (µg/l)	C_5-C_8 Aliphatics (µg/l)	C_9-C_{12} Aliphatics (µg/l)	C_9-C_{10} Aromatics (µg/l)
Ambient Water Quality Criteria in µg/l:		700*	5,000*	430***	NE	7,000*	620*	390**	1,800**	430**
Drinking Water Standards and Guidelines in µg/l:		5(1)	1,000(1)	700(1)	10,000(1)	70(1)	140(1)	400(1)	4,000(1)	200(1)
SW-4	4-Nov-99	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	3-Jan-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	25-Feb-00	<1.0	<1.0	<1.0	<3.0	5.4	NS	NS	NS	NS
	1-Mar-00	<1.0	<1.0	<1.0	<3.0	11	NS	NS	NS	NS
	14-Apr-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	21-Aug-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	2-Oct-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	10-Mar-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	18-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	22-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
SW-5	16-Feb-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	20-Nov-00	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	26-Feb-01	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5-Nov-01	<0.5	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	22-Jan-02	<1.0	1.4	<1.0	1.1	<1.0	NS	NS	NS	NS
	7-May-02	<1.0	2.6	<1.0	4.1	<1.0	NS	NS	NS	NS
	2-Oct-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	10-Mar-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	13-Nov-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	21-Mar-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	25-Sep-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	18-Dec-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Mar-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	17-Sep-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	118	<50.0
	23-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	21-Apr-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
SW-6	16-Feb-00	<1.0	<5.0	<5.0	<15	**166**	<5.0	<100	<100	<100
	25-Feb-00	<1.0	<1.0	<1.0	<3.0	57	NS	NS	NS	NS
	1-Mar-00	<5.0	<1.0	<1.0	<3.0	**200**	NS	NS	NS	NS
	14-Apr-00	<1.0	<5.0	<5.0	<15	37.3	<5.0	<100	<100	<100
	21-Aug-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	20-Nov-00	<5.0	<5.0	<5.0	<5.0	5.2	<5.0	<50	<50	<50
	26-Feb-01	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	23-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

Table 2-4

Summary of Surface Water Monitoring Data

Mobil Station No. 11735, 309 Lowell Street, Andover, MA (RTN 3-3072)

Sample No.	Sampling Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph-thalene (µg/l)	C_5-C_8 Aliphatics (µg/l)	C_9-C_{12} Aliphatics (µg/l)	C_9-C_{10} Aromatics (µg/l)
Ambient Water Quality Criteria in µg/l:		700*	5,000*	430***	NE	7,000*	620*	390**	1,800**	430**
Drinking Water Standards and Guidelines in µg/l:		5(1)	1,000(1)	700(1)	10,000(1)	70(1)	140(1)	400(1)	4,000(1)	200(1)
SW-7	1-Mar-00	<1.0	<1.0	<1.0	<3.0	11	NS	NS	NS	NS
	20-Nov-00	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	26-Feb-01	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5-Oct-01	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	5-Nov-01	<0.5	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	22-Jan-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	7-May-02	<1.0	<1.0	<1.0	2.8	1	NS	NS	NS	NS
	2-Oct-02	*Dry - No sample could be collected*								
	18-Nov-04	<1.0	<1.0	<1.0	<6.0	<1.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<1.0	<1.0	<6.0	<1.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.0	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	22-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
SW-A	26-Oct-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	13-Nov-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	17-Dec-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	6-Jan-99	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	9-Feb-99	<1.0	<1.0	<1.0	<3	2	NS	NS	NS	NS
	29-Mar-99	<1.0	<1.0	<1.0	<3	41	NS	NS	NS	NS
	24-Jun-99	<1.0	<5	<5	<15	<5	<5	<100	<100	<100
	4-Nov-99	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	3-Jan-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	16-Feb-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	25-Feb-00	<1.0	<1.0	<1.0	<3.0	<1.0	NA	NA	NA	NA
	14-Apr-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	20-Nov-00	<5.0	<5.0	<5.0	<10	**237**	<5.0	<50	<50	<50
	26-Feb-01	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	7-Sep-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5-Nov-01	<0.5	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	22-Jan-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	7-May-02	**11.2**	1.4	3.0	2.9	**918**	NS	NS	NS	NS
	2-Oct-02	<1.0	2.7	<1.0	<1.0	<1.0	NS	NS	NS	NS
	10-Mar-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	13-Nov-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	17-Oct-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	21-Mar-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	25-Sep-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	18-Dec-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Mar-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	17-Sep-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	23-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	21-Apr-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

Table 2-4

Summary of Surface Water Monitoring Data

Mobil Station No. 11735, 309 Lowell Street, Andover, MA (RTN 3-3072)

Sample No.	Sampling Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph-thalene (µg/l)	C_5-C_8 Aliphatics (µg/l)	C_9-C_{12} Aliphatics (µg/l)	C_9-C_{10} Aromatics (µg/l)
Ambient Water Quality Criteria in µg/l:		700*	5,000*	430***	NE	7,000*	620*	390**	1,800**	430**
Drinking Water Standards and Guidelines in µg/l:		5(1)	1,000(1)	700(1)	10,000(1)	70(1)	140(1)	400(1)	4,000(1)	200(1)
SW-B	26-Oct-98	<1.0	1	<1.0	<3	67	NS	NS	NS	NS
	13-Nov-98	<1.0	<1.0	<1.0	<3	2	NS	NS	NS	NS
	17-Dec-98	<1.0	<1.0	<1.0	<3	<1	NS	NS	NS	NS
	6-Jan-99	<1.0	<1.0	<1.0	<3	<1	NS	NS	NS	NS
	9-Feb-99	<1.0	<1.0	<1.0	<3	6	NS	NS	NS	NS
	29-Mar-99	<1.0	<1.0	<1.0	<3	11	NS	NS	NS	NS
	24-Jun-99	<1.0	<5	<5	<15	<5	<5	<100	<100	<100
	4-Nov-99	<1.0	<5.0	<5.0	<15	14.8	<5.0	<100	<100	<100
	3-Jan-00	<1.0	<5.0	<5.0	<15	**485**	<5.0	<100	<100	<100
	28-Jan-00	**24.2**	<5.0	17	10	**3,470**	<5.0	<100	<100	**200**
	16-Feb-00	3.3	<5.0	<5.0	<15	**743**	<5.0	<100	<100	<100
	25-Feb-00	1.1	<1.0	<1.0	<3.0	**130**	NS	NS	NS	NS
	1-Mar-00	<1.0	<1.0	<1.0	<3.0	**87**	NS	NS	NS	NS
	14-Apr-00	<1.0	<5.0	<5.0	<15	10.5	<5.0	<100	<100	<100
	21-Aug-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	20-Nov-00	<5.0	<5.0	<5.0	<10	26.6	<5.0	<50	<50	<50
	26-Feb-01	1.4	<5.0	<5.0	<15	51.7	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	7-Sep-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5-Nov-01	<5.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	22-Jan-02	<1.0	1.2	<1.0	2.0	1.4	NS	NS	NS	NS
	7-May-02	<1.0	4.7	<1.0	5.9	12.4	NS	NS	NS	NS
	2-Oct-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	10-Mar-03	<1.0	<1.0	<1.0	<1.0	4.30	NS	NS	NS	NS
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	18-Dec-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	22-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

Table 2-4

Summary of Surface Water Monitoring Data

Mobil Station No. 11735, 309 Lowell Street, Andover, MA (RTN 3-3072)

Sample No.	Sampling Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph-thalene (µg/l)	C_5-C_8 Aliphatics (µg/l)	C_9-C_{12} Aliphatics (µg/l)	C_9-C_{10} Aromatics (µg/l)
Ambient Water Quality Criteria in µg/l:		700*	5,000*	430***	NE	7,000*	620*	390**	1,800**	430**
Drinking Water Standards and Guidelines in µg/l:		5(1)	1,000(1)	700(1)	10,000(1)	70(1)	140(1)	400(1)	4,000(1)	200(1)
SW-C	26-Oct-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	13-Nov-98	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	17-Dec-98	<1.0	<2	<1.0	<3	2	NS	NS	NS	NS
	6-Jan-99	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	9-Feb-99	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	29-Mar-99	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	24-Jun-99	<1.0	<5	<5	<15	<5	<5	<100	<100	<100
	4-Nov-99	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	28-Jan-00	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	20-Nov-00	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	26-Feb-01	1.4	<5.0	<5.0	<15	52.4	<5.0	<100	<100	<100
	16-Jul-01	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5-Nov-01	<0.5	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	22-Jan-02	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	10-Mar-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	13-Nov-03	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	17-Nov-04	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	20-Jun-05	<1.0	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	15-Dec-05	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	26-Jun-06	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	13-Dec-06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jul-07	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7-Jan-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-08	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	14-Jan-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	19-Jun-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	23-Dec-09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10-Jun-10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

Notes:

Concentrations and Ambient Water Quality Criteria (AWQC) values reported in micrograms per liter (ug/L) or parts per billion (ppb).

* = AWQC values obtained from MADEPs "Background Documentation for the MCP Numerical Standards," dated April 1994.

** = AWQC values derived by MADEP to develop Method 1 GW-3 Groundwater Standards for these carbon ranges. Obtained from MADEPs "Spreadsheet Detailing VPH/EPH Standards Derivation," dated May 1999.

*** = AWQC value obtained from MADEPs "Spreadsheet Detailing VPH/EPH Standards Derivation" and U.S. Environmental Protection Agency's (EPA's) "Quality Criteria for Water 1994."

(1) = Derived from MADEP's "Drinking Water Standards and Guidelines for Chemicals in Massachusetts Drinking Waters" (Spring 2000).

Bold Concentrations indicate concentrations detected above the MADEP Drinking Water Standards and Guidelines.

NE = AWQC values or surrogates have not been established by MADEP or EPA.

NS = Constituent was not sampled during the indicated sampling event.

< = Values were less than laboratory detection limits.

APPENDIX E
LABORATORY REPORTS

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 5, 2023

Pat Corcoran
Atlas Technical Consultants LLC - Woburn
10 State Street, Suite 100
Woburn, MA 01801

Project Location: 309 Lowell St, Andover, MA
Client Job Number:
Project Number: 9521488019
Laboratory Work Order Number: 23C3162

Enclosed are results of analyses for samples as received by the laboratory on March 28, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rebecca Faust
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

23C3162-01 5

23C3162-02 9

23C3162-03 13

23C3162-04 17

Sample Preparation Information 21

QC Data 22

Petroleum Hydrocarbons Analyses - VPH 22

B335528 22

Miscellaneous Organic Analyses 24

B335824 24

Metals Analyses (Dissolved) 25

B335811 25

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) 26

B335495 26

B335608 26

B335774 26

Flag/Qualifier Summary 27

Certifications 28

Chain of Custody/Sample Receipt 29

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Atlas Technical Consultants LLC - Woburn
10 State Street, Suite 100
Woburn, MA 01801
ATTN: Pat Corcoran

REPORT DATE: 4/5/2023

PURCHASE ORDER NUMBER: Global

PROJECT NUMBER: 9521488019

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23C3162

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 309 Lowell St, Andover, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	23C3162-01	Ground Water		EPA 300.0	
				MADEP-VPH-Feb 2018 Rev 2.1	
				RSK175	
				SW-846 6010D	
OW-13	23C3162-02	Ground Water		EPA 300.0	
				MADEP-VPH-Feb 2018 Rev 2.1	
				RSK175	
				SW-846 6010D	
OW-ED	23C3162-03	Ground Water		EPA 300.0	
				MADEP-VPH-Feb 2018 Rev 2.1	
				RSK175	
				SW-846 6010D	
MW-3	23C3162-04	Ground Water		EPA 300.0	
				MADEP-VPH-Feb 2018 Rev 2.1	
				RSK175	
				SW-846 6010D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA 300.0

Qualifications:

H-04

Initial analysis within holding time. Reanalysis for the required dilution was past holding time.

Analyte & Samples(s) Qualified:

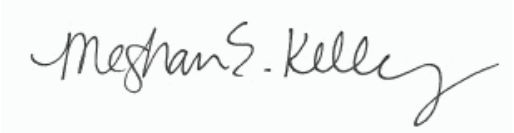
Nitrate as N
23C3162-01[MW-1]

MADEP-VPH-Feb 2018 Rev 2.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

Analytical column used for VPH analysis is Restek, Rtx-502.2, 105meter, 0.53mmID, 3um df. Trap used for VPH analysis is Carbopack B/CarboSieveS-III.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-1 | Sampled: 3/27/2023 10:35

Sample ID: 23C3162-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	115	70-130			3/30/23 0:01
2,5-Dibromotoluene (PID)	114	70-130			3/30/23 0:01

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-1 | Sampled: 3/27/2023 10:35

Sample ID: 23C3162-01

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	ND	0.0070	mg/L	1		RSK175	3/31/23	3/31/23 14:54	TPH

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-1 | Sampled: 3/27/2023 10:35

Sample ID: 23C3162-01

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	ND	0.050	mg/L	1		SW-846 6010D	3/31/23	4/5/23 12:18	ATP
Manganese	1.3	0.010	mg/L	1		SW-846 6010D	3/31/23	4/5/23 12:18	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-1 | Sampled: 3/27/2023 10:35

Sample ID: 23C3162-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	4.9	0.50	mg/L	5	H-04	EPA 300.0	3/30/23	3/30/23 0:44	NRH
Sulfate	38	1.0	mg/L	1		EPA 300.0	3/29/23	3/29/23 1:11	NRH

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-13 | Sampled: 3/27/2023 11:30

Sample ID: 23C3162-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
Unadjusted C9-C12 Aliphatics	240	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
C9-C10 Aromatics	220	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 0:30	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	111	70-130		3/30/23 0:30	
2,5-Dibromotoluene (PID)	112	70-130		3/30/23 0:30	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-13 | Sampled: 3/27/2023 11:30

Sample ID: 23C3162-02

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	0.27	0.0070	mg/L	1		RSK175	3/31/23	3/31/23 15:10	TPH

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-13 | Sampled: 3/27/2023 11:30

Sample ID: 23C3162-02

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	1.2	0.050	mg/L	1		SW-846 6010D	3/31/23	4/3/23 18:11	HNN
Manganese	0.36	0.010	mg/L	1		SW-846 6010D	3/31/23	4/3/23 18:11	HNN

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-13 | Sampled: 3/27/2023 11:30

Sample ID: 23C3162-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.32	0.10	mg/L	1		EPA 300.0	3/29/23	3/29/23 2:40	NRH
Sulfate	18	1.0	mg/L	1		EPA 300.0	3/29/23	3/29/23 2:40	NRH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-ED | Sampled: 3/27/2023 14:15

Sample ID: 23C3162-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
Methyl tert-Butyl Ether (MTBE)	4.5	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:00	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	101	70-130		3/30/23 1:00	
2,5-Dibromotoluene (PID)	98.8	70-130		3/30/23 1:00	

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-ED | Sampled: 3/27/2023 14:15

Sample ID: 23C3162-03

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	ND	0.0070	mg/L	1		RSK175	3/31/23	3/31/23 15:31	TPH

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-ED | Sampled: 3/27/2023 14:15

Sample ID: 23C3162-03

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	ND	0.050	mg/L	1		SW-846 6010D	3/31/23	4/3/23 18:16	HNN
Manganese	ND	0.010	mg/L	1		SW-846 6010D	3/31/23	4/3/23 18:16	HNN

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: OW-ED | Sampled: 3/27/2023 14:15

Sample ID: 23C3162-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	ND	0.10	mg/L	1		EPA 300.0	3/29/23	3/29/23 2:18	NRH
Sulfate	40	1.0	mg/L	1		EPA 300.0	3/29/23	3/29/23 2:18	NRH

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-3 | Sampled: 3/27/2023 13:05

Sample ID: 23C3162-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	3/29/23	3/30/23 1:29	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	111	70-130		3/30/23 1:29
2,5-Dibromotoluene (PID)	116	70-130		3/30/23 1:29

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-3 | Sampled: 3/27/2023 13:05

Sample ID: 23C3162-04

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	0.016	0.0070	mg/L	1		RSK175	3/31/23	3/31/23 15:40	TPH

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-3 | Sampled: 3/27/2023 13:05

Sample ID: 23C3162-04

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.14	0.050	mg/L	1		SW-846 6010D	3/31/23	4/3/23 18:22	HNN
Manganese	0.18	0.010	mg/L	1		SW-846 6010D	3/31/23	4/3/23 18:22	HNN

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23C3162

Date Received: 3/28/2023

Field Sample #: MW-3 | Sampled: 3/27/2023 13:05

Sample ID: 23C3162-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	1.1	0.10	mg/L	1		EPA 300.0	3/29/23	3/29/23 3:02	NRH
Sulfate	32	1.0	mg/L	1		EPA 300.0	3/29/23	3/29/23 3:02	NRH

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Sample Extraction Data

Prep Method: EPA 300.0 **Analytical Method: EPA 300.0**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23C3162-02 [OW-13]	B335495	10.0	10.0	03/29/23
23C3162-03 [OW-ED]	B335495	10.0	10.0	03/29/23
23C3162-04 [MW-3]	B335495	10.0	10.0	03/29/23

Prep Method: EPA 300.0 **Analytical Method: EPA 300.0**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23C3162-01 [MW-1]	B335608	10.0	10.0	03/30/23

Prep Method: EPA 300.0 **Analytical Method: EPA 300.0**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23C3162-01 [MW-1]	B335774	10.0	10.0	03/29/23
23C3162-02 [OW-13]	B335774	10.0	10.0	03/29/23
23C3162-03 [OW-ED]	B335774	10.0	10.0	03/29/23
23C3162-04 [MW-3]	B335774	10.0	10.0	03/29/23

Prep Method: MA VPH **Analytical Method: MADEP-VPH-Feb 2018 Rev 2.1**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23C3162-01 [MW-1]	B335528	5	5.00	03/29/23
23C3162-02 [OW-13]	B335528	5	5.00	03/29/23
23C3162-03 [OW-ED]	B335528	5	5.00	03/29/23
23C3162-04 [MW-3]	B335528	5	5.00	03/29/23

Prep Method: RSK175 **Analytical Method: RSK175**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23C3162-01 [MW-1]	B335824	1.00	1.00	03/31/23
23C3162-02 [OW-13]	B335824	1.00	1.00	03/31/23
23C3162-03 [OW-ED]	B335824	1.00	1.00	03/31/23
23C3162-04 [MW-3]	B335824	1.00	1.00	03/31/23

Prep Method: SW-846 3005A Dissolved **Analytical Method: SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23C3162-01 [MW-1]	B335811	5.00	5.00	03/31/23
23C3162-02 [OW-13]	B335811	5.00	5.00	03/31/23
23C3162-03 [OW-ED]	B335811	5.00	5.00	03/31/23
23C3162-04 [MW-3]	B335811	5.00	5.00	03/31/23

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B335528 - MA VPH										
Blank (B335528-BLK1)				Prepared & Analyzed: 03/29/23						
Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Butylcyclohexane	ND	1.0	µg/L							
Decane	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
2-Methylpentane	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Nonane	ND	1.0	µg/L							
Pentane	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
2,2,4-Trimethylpentane	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	*33.9*		µg/L	40.0		84.7	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*33.4*		µg/L	40.0		83.6	70-130			
LCS (B335528-BS1)				Prepared & Analyzed: 03/29/23						
Unadjusted C5-C8 Aliphatics	151	100	µg/L	150		101	70-130			
Unadjusted C9-C12 Aliphatics	151	100	µg/L	150		101	70-130			
C9-C10 Aromatics	52.3	100	µg/L	50.0		105	70-130			
Benzene	53.3	1.0	µg/L	50.0		107	70-130			
Butylcyclohexane	54.3	1.0	µg/L	50.0		109	70-130			
Decane	41.4	1.0	µg/L	50.0		82.8	70-130			
Ethylbenzene	53.0	1.0	µg/L	50.0		106	70-130			
Methyl tert-Butyl Ether (MTBE)	52.1	1.0	µg/L	50.0		104	70-130			
2-Methylpentane	52.7	1.0	µg/L	50.0		105	70-130			
Naphthalene	44.7	5.0	µg/L	50.0		89.3	70-130			
Nonane	55.3	1.0	µg/L	50.0		111	30-130			
Pentane	51.6	1.0	µg/L	50.0		103	70-130			
Toluene	52.5	1.0	µg/L	50.0		105	70-130			
1,2,4-Trimethylbenzene	52.3	1.0	µg/L	50.0		105	70-130			
2,2,4-Trimethylpentane	46.5	1.0	µg/L	50.0		93.0	70-130			
m+p Xylene	106	2.0	µg/L	100		106	70-130			
o-Xylene	53.8	1.0	µg/L	50.0		108	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	*38.2*		µg/L	40.0		95.4	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*37.9*		µg/L	40.0		94.7	70-130			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B335528 - MA VPH										
LCS Dup (B335528-BSD1)				Prepared & Analyzed: 03/29/23						
Unadjusted C5-C8 Aliphatics	154	100	µg/L	150		103	70-130	2.12	25	
Unadjusted C9-C12 Aliphatics	151	100	µg/L	150		100	70-130	0.249	25	
C9-C10 Aromatics	52.4	100	µg/L	50.0		105	70-130	0.195	25	
Benzene	54.1	1.0	µg/L	50.0		108	70-130	1.41	25	
Butylcyclohexane	54.3	1.0	µg/L	50.0		109	70-130	0.0276	25	
Decane	41.5	1.0	µg/L	50.0		83.0	70-130	0.241	25	
Ethylbenzene	53.6	1.0	µg/L	50.0		107	70-130	1.12	25	
Methyl tert-Butyl Ether (MTBE)	52.3	1.0	µg/L	50.0		105	70-130	0.502	25	
2-Methylpentane	53.8	1.0	µg/L	50.0		108	70-130	1.97	25	
Naphthalene	44.0	5.0	µg/L	50.0		88.0	70-130	1.56	25	
Nonane	54.8	1.0	µg/L	50.0		110	30-130	0.890	25	
Pentane	52.4	1.0	µg/L	50.0		105	70-130	1.54	25	
Toluene	53.4	1.0	µg/L	50.0		107	70-130	1.64	25	
1,2,4-Trimethylbenzene	52.4	1.0	µg/L	50.0		105	70-130	0.195	25	
2,2,4-Trimethylpentane	47.9	1.0	µg/L	50.0		95.8	70-130	2.92	25	
m+p Xylene	107	2.0	µg/L	100		107	70-130	0.858	25	
o-Xylene	54.2	1.0	µg/L	50.0		108	70-130	0.792	25	
Surrogate: 2,5-Dibromotoluene (FID)	*35.5*		µg/L	40.0		88.6	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*36.7*		µg/L	40.0		91.8	70-130			

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QUALITY CONTROL

Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B335824 - RSK175										
Blank (B335824-BLK1)				Prepared & Analyzed: 03/31/23						
Methane	ND	0.0070	mg/L							
LCS (B335824-BS1)				Prepared & Analyzed: 03/31/23						
Methane	0.14		mg/L	0.177		79.0	70.9-110			
Duplicate (B335824-DUP2)		**Source: 23C3162-02**		Prepared & Analyzed: 03/31/23						
Methane	0.227	0.0070	mg/L		0.269			17.1	20	

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B335811 - SW-846 3005A Dissolved										
Duplicate (B335811-DUP1)		**Source: 23C3162-01**		Prepared: 03/31/23 Analyzed: 04/05/23						
Iron	ND	0.050	mg/L		ND			NC	20	
Manganese	1.34	0.010	mg/L		1.33			0.152	20	
Matrix Spike (B335811-MS1)		**Source: 23C3162-01**		Prepared: 03/31/23 Analyzed: 04/05/23						
Iron	17.8		mg/L	16.0	-0.0216	111	75-125			
Manganese	3.51		mg/L	2.00	1.31	110	75-125			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B335495 - EPA 300.0										
Blank (B335495-BLK1)				Prepared & Analyzed: 03/28/23						
Nitrate as N	ND	0.10	mg/L							
LCS (B335495-BS1)				Prepared & Analyzed: 03/28/23						
Nitrate as N	0.95	0.10	mg/L	1.00		94.8	90-110			
LCS Dup (B335495-BSD1)				Prepared & Analyzed: 03/28/23						
Nitrate as N	0.95	0.10	mg/L	1.00		94.8	90-110	0.0317	20	
Batch B335608 - EPA 300.0										
Blank (B335608-BLK1)				Prepared & Analyzed: 03/29/23						
Nitrate as N	ND	0.10	mg/L							
LCS (B335608-BS1)				Prepared & Analyzed: 03/29/23						
Nitrate as N	0.95	0.10	mg/L	1.00		95.1	90-110			
LCS Dup (B335608-BSD1)				Prepared & Analyzed: 03/29/23						
Nitrate as N	0.95	0.10	mg/L	1.00		95.2	90-110	0.0210	20	
Batch B335774 - EPA 300.0										
Blank (B335774-BLK1)				Prepared & Analyzed: 03/28/23						
Sulfate	ND	1.0	mg/L							
LCS (B335774-BS1)				Prepared & Analyzed: 03/28/23						
Sulfate	10	1.0	mg/L	10.0		99.7	90-110			
LCS Dup (B335774-BSD1)				Prepared & Analyzed: 03/28/23						
Sulfate	10	1.0	mg/L	10.0		99.7	90-110	0.0652	20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-04	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Water	
Nitrate as N	NC,NY,MA,VA,ME,NH,CT,RI
Sulfate	NC,NY,MA,VA,ME,NH,CT,RI
MADEP-VPH-Feb 2018 Rev 2.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
RSK175 in Water	
Methane	VA,NY,ME
SW-846 6010D in Water	
Iron	CT,NH,NY,ME,NC,VA
Manganese	CT,NH,NY,ME,NC,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2023
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD 23C3162

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Company Name:	Atlas Technical Consultants LLC
Address:	10 State St., Ste. 100, Woburn, MA
Phone:	401 384-0042
Project Name:	Global Andover
Project Location:	309 Lowell St., Andover, MA
Project Number:	9521488019
Project Manager:	patrick.corcoran@oneatlas.com
Con-Test Quote Name/Number:	Global
Invoice Recipient:	
Sampled By:	

Requested Turnaround Time
7-Day ☑ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: Patrick.Corcoran@oneatlas.com
Fax To #:

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VPH	Nitrate and Sulfate	Methane	Diss. Fe and Mn (Field Filtered)	# of Containers	[2] Preservation Code	[3] Container Code
1	MW-1	3/27/23	10:35		X	GW	U	X	X	X	X			
2	OW-13	3/27/23	11:35		X	GW	U	X	X	X	X			
3	OW-ED	3/27/23	14:15		X	GW	U	X	X	X	X			
4	MW-3	3/27/23	13:05		X	GW	U	X	X	X	X			

ANALYSIS REQUESTED

Dissolved Metals Samples
● Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature)	Date/Time: 3/27/23 1545
Received by: (signature)	Date/Time: 3/28/23 1040
Relinquished by: (signature)	Date/Time: 3/28/23 1445
Received by: (signature)	Date/Time: 3/28 14:45
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA: CAM Report, 21J
GW-1 Stds.
CT:
Other:

Special Requirements
☑ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

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NELAC and AIHA LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☑ 21 J / Global ☐ School

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

KF

Table of Contents

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
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Table of Contents

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace PEOPLE ADVANCING SCIENCE

Client ATC

Project Global Andover

MCP/RCP Required MCP Req'd

Deliverable Package Req. CAM Report, 21J, GW-1

Location 309 Lowell St, Andover, MA

PWSID# (When Applicable) N/A

Arrival Method:

Courier [X] Fed Ex [ ] Walk In [ ] Other [ ]

Received By / Date / Time CH 03/28/23 1445

Back-Sheet By / Date / Time DWW 03/28/23 1755

Temperature Method GUN # 5

Temp [X] < 6° C Actual Temperature 3.5

Rush Samples: Yes (No) Notify

Short Hold: (Yes) No Notify Nicole

	True	False
Received on ice	[X]	[ ]
Received in Cooler	[X]	[ ]
Custody Seal: DATE TIME	[ ]	[X]
COC Relinquished	[X]	[ ]
COC/Samples Labels Agree	[X]	[ ]
All Samples in Good Condition	[X]	[ ]
Samples Received within Holding Time	[X]	[ ]
Is there enough Volume	[X]	[ ]
Proper Media/Container Used	[X]	[ ]
Splitting Samples Required	[ ]	[X]
MS/MSD	[ ]	[X]
Trip Blanks	[ ]	[X]
Lab to Filters	[ ]	[X]
COC Legible	[X]	[ ]

Notes regarding Samples/COC outside of SOP:

COC Included: (Check all included)

Client [X] Analysis [X] Sampler Name [X]

Project [X] IDs [X] Collection Date/Time [X]

All Samples Proper pH: N/A [X] True [ ]

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative
1L Amber Plastic								
500 mL Amber (Plastic)	4							
250 mL Amber (Plastic)			4					
Other Amber Clear Plastic								
16oz Amber Clear								
8oz Amber Clear								
4oz Amber Clear								
2oz Amber Clear								
Col/Bacteria								
Flashpoint								
Plastic Bag								
SOC Kit								
Perchlorate								
Encore								
Frozen								

	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials	False		16						

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Pace New England	Project #:	23C3162
Project Location:	309 Lowell St, Andover, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

23C3162-01 thru 23C3162-04

Matrices: Water

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH (GC/PID/FID) CAM IV A (X)	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP VPH (GC/MS) CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

<u>Data User Note:</u> Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Meghan E. Kelley Position: Reporting Specialist

Printed Name: Meghan E. Kelley Date: 04/05/23

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 12, 2023

Pat Corcoran
Atlas Technical Consultants LLC - Woburn
10 State Street, Suite 100
Woburn, MA 01801

Project Location: 309 Lowell St, Andover, MA
Client Job Number:
Project Number: 9521488019
Laboratory Work Order Number: 23D0511

Enclosed are results of analyses for samples as received by the laboratory on April 5, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rebecca Faust
Project Manager

Table of Contents

Sample Summary 4

Case Narrative 7

Sample Results 11

23D0511-01 11

23D0511-02 16

23D0511-03 21

23D0511-04 26

23D0511-05 31

23D0511-06 36

23D0511-07 41

23D0511-08 46

23D0511-09 51

23D0511-10 56

23D0511-11 61

23D0511-12 66

23D0511-13 71

23D0511-14 76

23D0511-15 81

23D0511-16 86

23D0511-17 91

23D0511-18 96

Sample Preparation Information 101

QC Data 104

Polychlorinated Biphenyls with 3540 Soxhlet Extraction 104

B336357 104

Table of Contents (continued)

Petroleum Hydrocarbons Analyses - EPH 106

B336385 106

Petroleum Hydrocarbons Analyses - VPH 109

B336361 109

Metals Analyses (Total) 111

B336368 111

Dual Column RPD Report 112

Flag/Qualifier Summary 121

Certifications 122

Chain of Custody/Sample Receipt 124

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Atlas Technical Consultants LLC - Woburn
10 State Street, Suite 100
Woburn, MA 01801
ATTN: Pat Corcoran

REPORT DATE: 4/12/2023

PURCHASE ORDER NUMBER: Global

PROJECT NUMBER: 9521488019

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23D0511

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 309 Lowell St, Andover, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SB-1 6 ft	23D0511-01	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	
SB-1 11ft	23D0511-02	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	
SB-1 16 ft	23D0511-03	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	
SB-2 6 ft	23D0511-04	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	
SB-2 11 ft	23D0511-05	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	
SB-2 16 ft	23D0511-06	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	
SB-3 6 ft	23D0511-07	Soil		MADEP EPH rev 2.1	
				MADEP-VPH-Feb 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 8082A	

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ATTN: Pat Corcoran

REPORT DATE: 4/12/2023

PURCHASE ORDER NUMBER: Global

PROJECT NUMBER: 9521488019

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23D0511

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 309 Lowell St, Andover, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SB-3 11 ft	23D0511-08	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-3 16 ft	23D0511-09	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-4 6 ft	23D0511-10	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-4 11ft	23D0511-11	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-4 16 ft	23D0511-12	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-5 6 ft	23D0511-13	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-5 11 ft	23D0511-14	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	

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Atlas Technical Consultants LLC - Woburn
10 State Street, Suite 100
Woburn, MA 01801
ATTN: Pat Corcoran

REPORT DATE: 4/12/2023

PURCHASE ORDER NUMBER: Global

PROJECT NUMBER: 9521488019

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23D0511

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 309 Lowell St, Andover, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SB-5 16 ft	23D0511-15	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-6 6 ft	23D0511-16	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-6 11 ft	23D0511-17	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	
SB-6 16 ft	23D0511-18	Soil		MADEP EPH rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1 SM 2540G SW-846 6010D SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

MADEP EPH rev 2.1

Qualifications:

E

Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:

Fluoranthene
B336385-MS1

Phenanthrene
B336385-MS1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

C19-C36 Aliphatics
B336385-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

Benzo(a)anthracene
B336385-MS1

Benzo(a)pyrene
B336385-MS1

Benzo(b)fluoranthene
B336385-MS1

Chrysene
B336385-MS1

Fluoranthene
B336385-MS1

Phenanthrene
B336385-MS1

Pyrene
B336385-MS1

Unadjusted C11-C22 Aromatics
B336385-MS1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Benzo(a)anthracene
23D0511-07[SB-3 6 ft], B336385-MSD1

Benzo(a)pyrene
23D0511-07[SB-3 6 ft], B336385-MSD1

Benzo(b)fluoranthene
23D0511-07[SB-3 6 ft], B336385-MSD1

Chrysene
23D0511-07[SB-3 6 ft], B336385-MSD1

Fluoranthene
23D0511-07[SB-3 6 ft], B336385-MSD1

Phenanthrene
23D0511-07[SB-3 6 ft], B336385-MSD1

Pyrene
23D0511-07[SB-3 6 ft], B336385-MSD1

Unadjusted C11-C22 Aromatics
23D0511-07[SB-3 6 ft], B336385-MSD1

MADEP-VPH-Feb 2018 Rev 2.1

Qualifications:

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RL-05

Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:

Naphthalene
23D0511-02[SB-1 11ft]

Toluene
23D0511-02[SB-1 11ft]

S-08

Duplicate analysis confirmed surrogate failure due to matrix effects.

Analyte & Samples(s) Qualified:

2,5-Dibromotoluene (FID)
23D0511-03RE1[SB-1 16 ft]

2,5-Dibromotoluene (PID)
23D0511-03RE1[SB-1 16 ft]

S-15

Surrogate recovery outside of control limits due to suspected sample matrix interference. Chromatogram(s) is attached.

Analyte & Samples(s) Qualified:

2,5-Dibromotoluene (FID)
23D0511-02[SB-1 11ft], 23D0511-05[SB-2 11 ft], 23D0511-11[SB-4 11ft]

2,5-Dibromotoluene (PID)
23D0511-02[SB-1 11ft], 23D0511-05[SB-2 11 ft], 23D0511-11[SB-4 11ft]

S-17

Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.

Analyte & Samples(s) Qualified:

2,5-Dibromotoluene (FID)
23D0511-01[SB-1 6 ft], 23D0511-04[SB-2 6 ft]

2,5-Dibromotoluene (PID)
23D0511-01[SB-1 6 ft], 23D0511-04[SB-2 6 ft]

S-19

Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.

Analyte & Samples(s) Qualified:

2,5-Dibromotoluene (FID)
23D0511-03[SB-1 16 ft]

2,5-Dibromotoluene (PID)
23D0511-03[SB-1 16 ft]

SW-846 8082A

Qualifications:

MS-21

Matrix spike and/or spike duplicate recovery bias high due to contribution of other Aroclors present in the source sample.

Analyte & Samples(s) Qualified:

Aroclor-1260
B336357-MS1, B336357-MSD1

Aroclor-1260 [2C]
B336357-MS1, B336357-MSD1

O-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

23D0511-03[SB-1 16 ft], 23D0511-06[SB-2 16 ft], 23D0511-08[SB-3 11 ft], 23D0511-09[SB-3 16 ft], 23D0511-10[SB-4 6 ft], 23D0511-12[SB-4 16 ft], 23D0511-13[SB-5 6 ft], 23D0511-14[SB-5 11 ft], 23D0511-15[SB-5 16 ft], 23D0511-16[SB-6 6 ft], 23D0511-17[SB-6 11 ft], 23D0511-18[SB-6 16 ft]

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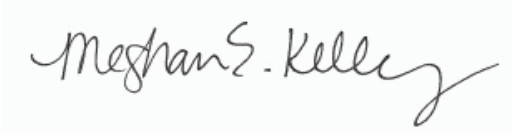
MADEP-VPH-Feb 2018 Rev 2.1

No significant modifications were made to the method. All VPH samples were received preserved properly in methanol with a soil/methanol ratio of 1:1 +/- 25% completely covered by methanol in the proper containers specified on the chain-of-custody form unless specified in this narrative.

Analytical column used for VPH analysis is Restek, Rtx-502.2, 105meter, 0.53mmID, 3um df. Trap used for VPH analysis is Carbopack B/CarboSieveS-III.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA
Sample Description:
Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 6 ft
Sampled: 4/4/2023 09:30

Sample ID: 23D0511-01

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1221 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1232 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1242 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1248 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1254 [1]	1.1	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1260 [2]	0.17	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1262 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM
Aroclor-1268 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:32	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	89.9	30-150		4/7/23 16:32
Decachlorobiphenyl [2]	84.4	30-150		4/7/23 16:32
Tetrachloro-m-xylene [1]	86.4	30-150		4/7/23 16:32
Tetrachloro-m-xylene [2]	84.1	30-150		4/7/23 16:32

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 6 ft | Sampled: 4/4/2023 09:30

Sample ID: 23D0511-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	28	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
C19-C36 Aliphatics	200	22	mg/Kg dry	2		MADEP EPH rev 2.1	4/6/23	4/11/23 12:38	GJB
Unadjusted C11-C22 Aromatics	66	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
C11-C22 Aromatics	66	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Fluoranthene	0.11	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:06	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	61.2	40-140		4/10/23 19:06
Chlorooctadecane (COD)	60.6	40-140		4/11/23 12:38
o-Terphenyl (OTP)	74.1	40-140		4/10/23 19:06
2-Bromonaphthalene	91.9	40-140		4/10/23 19:06
2-Fluorobiphenyl	89.8	40-140		4/10/23 19:06

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 6 ft | Sampled: 4/4/2023 09:30

Sample ID: 23D0511-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.09

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
Unadjusted C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
C9-C10 Aromatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
Benzene	ND	0.063	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
Ethylbenzene	ND	0.063	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.063	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
Naphthalene	ND	0.32	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
Toluene	ND	0.063	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
m+p Xylene	ND	0.13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH
o-Xylene	ND	0.063	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 20:35	EEH

Surrogates	% Recovery		Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	**158**	*	70-130	S-17	4/6/23	20:35
2,5-Dibromotoluene (PID)	**147**	*	70-130	S-17	4/6/23	20:35

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 6 ft | Sampled: 4/4/2023 09:30

Sample ID: 23D0511-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	26	3.4	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 22:59	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 6 ft | Sampled: 4/4/2023 09:30

Sample ID: 23D0511-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.1		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 11ft | Sampled: 4/4/2023 10:25

Sample ID: 23D0511-02

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1221 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1232 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1242 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1248 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1254 [1]	0.67	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1260 [2]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1262 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM
Aroclor-1268 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 16:49	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	95.1	30-150		4/7/23 16:49
Decachlorobiphenyl [2]	87.4	30-150		4/7/23 16:49
Tetrachloro-m-xylene [1]	89.3	30-150		4/7/23 16:49
Tetrachloro-m-xylene [2]	85.0	30-150		4/7/23 16:49

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 11ft | Sampled: 4/4/2023 10:25

Sample ID: 23D0511-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	280	34	mg/Kg dry	3		MADEP EPH rev 2.1	4/6/23	4/11/23 12:57	GJB
C19-C36 Aliphatics	120	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Unadjusted C11-C22 Aromatics	120	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
C11-C22 Aromatics	110	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Acenaphthene	0.34	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Fluorene	0.21	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
2-Methylnaphthalene	4.2	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Naphthalene	0.83	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Phenanthrene	0.20	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:26	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	53.0	40-140		4/10/23 19:26
Chlorooctadecane (COD)	52.8	40-140		4/11/23 12:57
o-Terphenyl (OTP)	71.4	40-140		4/10/23 19:26
2-Bromonaphthalene	88.1	40-140		4/10/23 19:26
2-Fluorobiphenyl	85.0	40-140		4/10/23 19:26

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 11ft | Sampled: 4/4/2023 10:25

Sample ID: 23D0511-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.99

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	3200	490	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
C5-C8 Aliphatics	3200	490	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
Unadjusted C9-C12 Aliphatics	2500	490	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
C9-C12 Aliphatics	ND	490	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
C9-C10 Aromatics	1900	490	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
Benzene	8.6	2.4	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
Ethylbenzene	7.8	2.4	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
Methyl tert-Butyl Ether (MTBE)	5.8	2.4	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
Naphthalene	ND	12	mg/Kg dry	40	RL-05	MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
Toluene	ND	2.4	mg/Kg dry	40	RL-05	MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
m+p Xylene	63	4.9	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH
o-Xylene	40	2.4	mg/Kg dry	40		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:55	EEH

Surrogates	% Recovery		Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	**166**	*	70-130	S-15	4/7/23	6:55
2,5-Dibromotoluene (PID)	**170**	*	70-130	S-15	4/7/23	6:55

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 11ft | Sampled: 4/4/2023 10:25

Sample ID: 23D0511-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	5.5	3.7	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 23:06	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 11ft | Sampled: 4/4/2023 10:25

Sample ID: 23D0511-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.3		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 16 ft | Sampled: 4/4/2023 10:45

Sample ID: 23D0511-03

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1254 [2]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:06	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	95.0	30-150		4/7/23 17:06
Decachlorobiphenyl [2]	85.3	30-150		4/7/23 17:06
Tetrachloro-m-xylene [1]	83.2	30-150		4/7/23 17:06
Tetrachloro-m-xylene [2]	78.9	30-150		4/7/23 17:06

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 16 ft | Sampled: 4/4/2023 10:45

Sample ID: 23D0511-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 19:45	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	56.0	40-140		4/10/23 19:45
o-Terphenyl (OTP)	60.7	40-140		4/10/23 19:45
2-Bromonaphthalene	82.2	40-140		4/10/23 19:45
2-Fluorobiphenyl	80.1	40-140		4/10/23 19:45

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 16 ft | Sampled: 4/4/2023 10:45

Sample ID: 23D0511-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.10

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	41	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Unadjusted C5-C8 Aliphatics	38	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
C5-C8 Aliphatics	40	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
C5-C8 Aliphatics	38	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
Unadjusted C9-C12 Aliphatics	29	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Unadjusted C9-C12 Aliphatics	30	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
C9-C10 Aromatics	20	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
C9-C10 Aromatics	19	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
Benzene	0.082	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Benzene	0.081	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
Ethylbenzene	0.096	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Ethylbenzene	0.10	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
Naphthalene	ND	0.31	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Naphthalene	ND	0.31	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
Toluene	ND	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
Toluene	ND	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
m+p Xylene	0.73	0.12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
m+p Xylene	0.77	0.12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH
o-Xylene	0.46	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 6:25	EEH
o-Xylene	0.45	0.061	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:05	EEH

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	**145**	*	70-130	S-08	4/7/23 6:25
2,5-Dibromotoluene (FID)	**143**	*	70-130	S-19	4/6/23 21:05
2,5-Dibromotoluene (PID)	**147**	*	70-130	S-08	4/7/23 6:25
2,5-Dibromotoluene (PID)	**145**	*	70-130	S-19	4/6/23 21:05

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 16 ft | Sampled: 4/4/2023 10:45

Sample ID: 23D0511-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	6.2	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 23:13	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-1 16 ft | Sampled: 4/4/2023 10:45

Sample ID: 23D0511-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.4		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 6 ft | Sampled: 4/4/2023 09:55

Sample ID: 23D0511-04

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1254 [1]	0.60	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1260 [2]	0.098	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:29	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	95.2	30-150		4/7/23 17:29
Decachlorobiphenyl [2]	87.5	30-150		4/7/23 17:29
Tetrachloro-m-xylene [1]	92.8	30-150		4/7/23 17:29
Tetrachloro-m-xylene [2]	87.2	30-150		4/7/23 17:29

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 6 ft | Sampled: 4/4/2023 09:55

Sample ID: 23D0511-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	29	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
C19-C36 Aliphatics	210	21	mg/Kg dry	2		MADEP EPH rev 2.1	4/6/23	4/11/23 13:16	GJB
Unadjusted C11-C22 Aromatics	73	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
C11-C22 Aromatics	72	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Benzo(b)fluoranthene	0.17	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Benzo(g,h,i)perylene	0.14	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Chrysene	0.14	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Fluoranthene	0.32	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Indeno(1,2,3-cd)pyrene	0.11	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Phenanthrene	0.15	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB
Pyrene	0.13	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:04	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	55.5	40-140		4/10/23 20:04
Chlorooctadecane (COD)	56.3	40-140		4/11/23 13:16
o-Terphenyl (OTP)	72.2	40-140		4/10/23 20:04
2-Bromonaphthalene	94.5	40-140		4/10/23 20:04
2-Fluorobiphenyl	92.1	40-140		4/10/23 20:04

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 6 ft | Sampled: 4/4/2023 09:55

Sample ID: 23D0511-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.12

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
C5-C8 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
C9-C12 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
C9-C10 Aromatics	ND	10	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
Benzene	ND	0.052	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
Ethylbenzene	ND	0.052	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.052	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
Naphthalene	ND	0.26	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
Toluene	ND	0.052	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
m+p Xylene	ND	0.10	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH
o-Xylene	ND	0.052	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 21:34	EEH

Surrogates	% Recovery		Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	**165**	*	70-130	S-17	4/6/23	21:34
2,5-Dibromotoluene (PID)	**155**	*	70-130	S-17	4/6/23	21:34

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 6 ft | Sampled: 4/4/2023 09:55

Sample ID: 23D0511-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	22	3.5	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 23:20	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 6 ft | Sampled: 4/4/2023 09:55

Sample ID: 23D0511-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.7		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA Sample Description: Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 11 ft Sampled: 4/4/2023 11:10

Sample ID: 23D0511-05

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1221 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1232 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1242 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1248 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1254 [1]	0.34	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1260 [2]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1262 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM
Aroclor-1268 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 17:46	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	98.4	30-150		4/7/23 17:46
Decachlorobiphenyl [2]	90.6	30-150		4/7/23 17:46
Tetrachloro-m-xylene [1]	93.5	30-150		4/7/23 17:46
Tetrachloro-m-xylene [2]	87.8	30-150		4/7/23 17:46

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 11 ft | Sampled: 4/4/2023 11:10

Sample ID: 23D0511-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:23	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	54.6	40-140		4/10/23 20:23
o-Terphenyl (OTP)	75.7	40-140		4/10/23 20:23
2-Bromonaphthalene	97.4	40-140		4/10/23 20:23
2-Fluorobiphenyl	94.8	40-140		4/10/23 20:23

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 11 ft | Sampled: 4/4/2023 11:10

Sample ID: 23D0511-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.91

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	2800	920	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
C5-C8 Aliphatics	2800	920	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
Unadjusted C9-C12 Aliphatics	4500	920	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
C9-C12 Aliphatics	ND	920	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
C9-C10 Aromatics	2800	920	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
Benzene	11	4.6	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
Ethylbenzene	66	4.6	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
Methyl tert-Butyl Ether (MTBE)	4.7	4.6	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
Naphthalene	47	23	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
Toluene	11	4.6	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
m+p Xylene	630	9.2	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH
o-Xylene	250	4.6	mg/Kg dry	80		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 7:24	EEH

Surrogates	% Recovery		Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	**153**	*	70-130	S-15	4/7/23	7:24
2,5-Dibromotoluene (PID)	**157**	*	70-130	S-15	4/7/23	7:24

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 11 ft | Sampled: 4/4/2023 11:10

Sample ID: 23D0511-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	6.5	3.7	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 23:40	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 11 ft | Sampled: 4/4/2023 11:10

Sample ID: 23D0511-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.2		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 16 ft | Sampled: 4/4/2023 11:15

Sample ID: 23D0511-06

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:03	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	99.2	30-150		4/7/23 18:03
Decachlorobiphenyl [2]	89.9	30-150		4/7/23 18:03
Tetrachloro-m-xylene [1]	86.4	30-150		4/7/23 18:03
Tetrachloro-m-xylene [2]	82.7	30-150		4/7/23 18:03

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 16 ft | Sampled: 4/4/2023 11:15

Sample ID: 23D0511-06

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	330	33	mg/Kg dry	3		MADEP EPH rev 2.1	4/6/23	4/11/23 13:36	GJB
C19-C36 Aliphatics	65	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Unadjusted C11-C22 Aromatics	130	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
C11-C22 Aromatics	110	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Acenaphthene	0.31	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Fluorene	0.21	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
2-Methylnaphthalene	11	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Naphthalene	8.9	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Phenanthrene	0.23	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 20:42	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	50.9	40-140		4/10/23 20:42
Chlorooctadecane (COD)	60.5	40-140		4/11/23 13:36
o-Terphenyl (OTP)	58.6	40-140		4/10/23 20:42
2-Bromonaphthalene	78.8	40-140		4/10/23 20:42
2-Fluorobiphenyl	87.9	40-140		4/10/23 20:42

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 16 ft | Sampled: 4/4/2023 11:15

Sample ID: 23D0511-06

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.02

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
Unadjusted C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
C9-C10 Aromatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
Benzene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
Ethylbenzene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
Naphthalene	ND	0.33	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
Toluene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
m+p Xylene	0.23	0.13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH
o-Xylene	0.089	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:04	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	102	70-130		4/6/23 22:04
2,5-Dibromotoluene (PID)	103	70-130		4/6/23 22:04

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 16 ft | Sampled: 4/4/2023 11:15

Sample ID: 23D0511-06

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	17	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 23:47	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-2 16 ft | Sampled: 4/4/2023 11:15

Sample ID: 23D0511-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.8		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 6 ft | Sampled: 4/4/2023 10:30

Sample ID: 23D0511-07

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1221 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1232 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1242 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1248 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1254 [1]	0.25	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1260 [2]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1262 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM
Aroclor-1268 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 18:21	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	93.0	30-150		4/7/23 18:21
Decachlorobiphenyl [2]	87.7	30-150		4/7/23 18:21
Tetrachloro-m-xylene [1]	94.8	30-150		4/7/23 18:21
Tetrachloro-m-xylene [2]	89.3	30-150		4/7/23 18:21

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 6 ft | Sampled: 4/4/2023 10:30

Sample ID: 23D0511-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
C19-C36 Aliphatics	96	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Unadjusted C11-C22 Aromatics	52	11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
C11-C22 Aromatics	42	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Acenaphthene	0.12	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Anthracene	0.25	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Benzo(a)anthracene	0.77	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Benzo(a)pyrene	0.83	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Benzo(b)fluoranthene	1.0	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Benzo(g,h,i)perylene	0.51	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Benzo(k)fluoranthene	0.39	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Chrysene	0.92	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Dibenz(a,h)anthracene	0.14	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Fluoranthene	1.6	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Indeno(1,2,3-cd)pyrene	0.53	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Phenanthrene	1.1	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB
Pyrene	1.6	0.11	mg/Kg dry	1	R-06	MADEP EPH rev 2.1	4/6/23	4/10/23 23:54	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	62.5	40-140		4/10/23 23:54
o-Terphenyl (OTP)	69.8	40-140		4/10/23 23:54
2-Bromonaphthalene	78.0	40-140		4/10/23 23:54
2-Fluorobiphenyl	76.5	40-140		4/10/23 23:54

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 6 ft | Sampled: 4/4/2023 10:30

Sample ID: 23D0511-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.14

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
Unadjusted C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
C9-C10 Aromatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
Benzene	ND	0.057	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
Ethylbenzene	ND	0.057	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.057	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
Naphthalene	ND	0.29	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
Toluene	ND	0.057	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH
o-Xylene	ND	0.057	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 22:33	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	109	70-130		4/6/23 22:33
2,5-Dibromotoluene (PID)	112	70-130		4/6/23 22:33

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 6 ft | Sampled: 4/4/2023 10:30

Sample ID: 23D0511-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	4.7	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/7/23 23:54	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 6 ft | Sampled: 4/4/2023 10:30

Sample ID: 23D0511-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.3		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 11 ft | Sampled: 4/4/2023 12:05

Sample ID: 23D0511-08

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1248 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1254 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1260 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:15	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	103	30-150		4/7/23 20:15
Decachlorobiphenyl [2]	90.6	30-150		4/7/23 20:15
Tetrachloro-m-xylene [1]	89.5	30-150		4/7/23 20:15
Tetrachloro-m-xylene [2]	83.7	30-150		4/7/23 20:15

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 11 ft | Sampled: 4/4/2023 12:05

Sample ID: 23D0511-08

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Chrysene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Fluorene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB
Pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:02	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	53.8	40-140		4/10/23 21:02
o-Terphenyl (OTP)	55.0	40-140		4/10/23 21:02
2-Bromonaphthalene	88.8	40-140		4/10/23 21:02
2-Fluorobiphenyl	86.6	40-140		4/10/23 21:02

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 11 ft | Sampled: 4/4/2023 12:05

Sample ID: 23D0511-08

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.08

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
C5-C8 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
Unadjusted C9-C12 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
C9-C12 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
C9-C10 Aromatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
Benzene	ND	0.068	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
Ethylbenzene	ND	0.068	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.068	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
Naphthalene	ND	0.34	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
Toluene	ND	0.068	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
m+p Xylene	ND	0.14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH
o-Xylene	ND	0.068	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:03	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	113	70-130		4/6/23 23:03
2,5-Dibromotoluene (PID)	115	70-130		4/6/23 23:03

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 11 ft | Sampled: 4/4/2023 12:05

Sample ID: 23D0511-08

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	15	4.1	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:01	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 11 ft | Sampled: 4/4/2023 12:05

Sample ID: 23D0511-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	79.7		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 16 ft | Sampled: 4/4/2023 12:25

Sample ID: 23D0511-09

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1221 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1232 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1242 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1248 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1254 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1260 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1262 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM
Aroclor-1268 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:32	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	103	30-150		4/7/23 20:32
Decachlorobiphenyl [2]	90.6	30-150		4/7/23 20:32
Tetrachloro-m-xylene [1]	91.3	30-150		4/7/23 20:32
Tetrachloro-m-xylene [2]	85.2	30-150		4/7/23 20:32

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 16 ft | Sampled: 4/4/2023 12:25

Sample ID: 23D0511-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:21	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	58.2	40-140		4/10/23 21:21
o-Terphenyl (OTP)	65.3	40-140		4/10/23 21:21
2-Bromonaphthalene	92.2	40-140		4/10/23 21:21
2-Fluorobiphenyl	90.3	40-140		4/10/23 21:21

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 16 ft | Sampled: 4/4/2023 12:25

Sample ID: 23D0511-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.97

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
C5-C8 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
Unadjusted C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
C9-C10 Aromatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
Benzene	ND	0.059	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
Ethylbenzene	ND	0.059	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.059	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
Naphthalene	ND	0.29	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
Toluene	ND	0.059	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
m+p Xylene	ND	0.12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH
o-Xylene	ND	0.059	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/6/23 23:32	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	97.2	70-130		4/6/23 23:32
2,5-Dibromotoluene (PID)	103	70-130		4/6/23 23:32

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 16 ft | Sampled: 4/4/2023 12:25

Sample ID: 23D0511-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:08	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-3 16 ft | Sampled: 4/4/2023 12:25

Sample ID: 23D0511-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.6		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 6 ft | Sampled: 4/4/2023 10:55

Sample ID: 23D0511-10

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1221 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1232 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1242 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1248 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1254 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1260 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1262 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM
Aroclor-1268 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 20:49	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	101	30-150		4/7/23 20:49
Decachlorobiphenyl [2]	89.2	30-150		4/7/23 20:49
Tetrachloro-m-xylene [1]	92.1	30-150		4/7/23 20:49
Tetrachloro-m-xylene [2]	85.8	30-150		4/7/23 20:49

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 6 ft | Sampled: 4/4/2023 10:55

Sample ID: 23D0511-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
C19-C36 Aliphatics	23	10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Acenaphthylene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Fluoranthene	0.11	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Fluorene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB
Pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 23:35	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	60.6	40-140		4/10/23 23:35
o-Terphenyl (OTP)	68.2	40-140		4/10/23 23:35
2-Bromonaphthalene	84.6	40-140		4/10/23 23:35
2-Fluorobiphenyl	82.7	40-140		4/10/23 23:35

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 6 ft | Sampled: 4/4/2023 10:55

Sample ID: 23D0511-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.97

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
Unadjusted C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
C9-C10 Aromatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
Benzene	ND	0.055	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
Ethylbenzene	ND	0.055	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.055	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
Naphthalene	ND	0.28	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
Toluene	ND	0.055	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH
o-Xylene	ND	0.055	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:02	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	103	70-130		4/7/23	0:02
2,5-Dibromotoluene (PID)	102	70-130		4/7/23	0:02

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 6 ft | Sampled: 4/4/2023 10:55

Sample ID: 23D0511-10

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	5.4	3.4	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:15	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 6 ft | Sampled: 4/4/2023 10:55

Sample ID: 23D0511-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	96.3		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 11ft | Sampled: 4/4/2023 12:40

Sample ID: 23D0511-11

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1221 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1232 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1242 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1248 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1254 [1]	0.094	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1260 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1262 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM
Aroclor-1268 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:06	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	101	30-150		4/7/23 21:06
Decachlorobiphenyl [2]	89.7	30-150		4/7/23 21:06
Tetrachloro-m-xylene [1]	90.4	30-150		4/7/23 21:06
Tetrachloro-m-xylene [2]	84.4	30-150		4/7/23 21:06

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 11ft | Sampled: 4/4/2023 12:40

Sample ID: 23D0511-11

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	30	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
C19-C36 Aliphatics	43	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Unadjusted C11-C22 Aromatics	13	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
C11-C22 Aromatics	13	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:40	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	60.1	40-140		4/10/23 21:40
o-Terphenyl (OTP)	64.8	40-140		4/10/23 21:40
2-Bromonaphthalene	85.9	40-140		4/10/23 21:40
2-Fluorobiphenyl	84.7	40-140		4/10/23 21:40

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 11ft | Sampled: 4/4/2023 12:40

Sample ID: 23D0511-11

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.99

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	970	130	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
C5-C8 Aliphatics	960	130	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
Unadjusted C9-C12 Aliphatics	830	130	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
C9-C12 Aliphatics	270	130	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
C9-C10 Aromatics	520	130	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
Benzene	0.90	0.65	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
Ethylbenzene	4.1	0.65	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
Methyl tert-Butyl Ether (MTBE)	2.0	0.65	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
Naphthalene	4.1	3.2	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
Toluene	ND	0.65	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
m+p Xylene	15	1.3	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH
o-Xylene	21	0.65	mg/Kg dry	10		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 5:26	EEH

Surrogates	% Recovery		Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	**156**	*	70-130	S-15	4/7/23 5:26	
2,5-Dibromotoluene (PID)	**160**	*	70-130	S-15	4/7/23 5:26	

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 11ft | Sampled: 4/4/2023 12:40

Sample ID: 23D0511-11

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	5.3	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:22	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 11ft | Sampled: 4/4/2023 12:40

Sample ID: 23D0511-11

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.6		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 16 ft | Sampled: 4/4/2023 12:50

Sample ID: 23D0511-12

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1221 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1232 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1242 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1248 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1254 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1260 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1262 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM
Aroclor-1268 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:23	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	101	30-150		4/7/23 21:23
Decachlorobiphenyl [2]	89.7	30-150		4/7/23 21:23
Tetrachloro-m-xylene [1]	87.7	30-150		4/7/23 21:23
Tetrachloro-m-xylene [2]	82.0	30-150		4/7/23 21:23

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 16 ft | Sampled: 4/4/2023 12:50

Sample ID: 23D0511-12

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	21	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
C19-C36 Aliphatics	34	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
2-Methylnaphthalene	0.13	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 21:59	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	59.5	40-140		4/10/23 21:59
o-Terphenyl (OTP)	61.8	40-140		4/10/23 21:59
2-Bromonaphthalene	83.8	40-140		4/10/23 21:59
2-Fluorobiphenyl	83.2	40-140		4/10/23 21:59

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 16 ft | Sampled: 4/4/2023 12:50

Sample ID: 23D0511-12

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.94

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
Unadjusted C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
C9-C10 Aromatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
Benzene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
Ethylbenzene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
Naphthalene	ND	0.32	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
Toluene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
m+p Xylene	ND	0.13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH
o-Xylene	ND	0.065	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 0:31	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	103	70-130		4/7/23	0:31
2,5-Dibromotoluene (PID)	103	70-130		4/7/23	0:31

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA Sample Description: Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 16 ft Sampled: 4/4/2023 12:50

Sample ID: 23D0511-12

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	12	3.8	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:30	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-4 16 ft | Sampled: 4/4/2023 12:50

Sample ID: 23D0511-12

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.6		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 6 ft | Sampled: 4/4/2023 11:25

Sample ID: 23D0511-13

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1221 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1232 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1242 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1248 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1254 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1260 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1262 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM
Aroclor-1268 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:40	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	99.8	30-150		4/7/23 21:40
Decachlorobiphenyl [2]	88.1	30-150		4/7/23 21:40
Tetrachloro-m-xylene [1]	84.7	30-150		4/7/23 21:40
Tetrachloro-m-xylene [2]	79.5	30-150		4/7/23 21:40

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 6 ft | Sampled: 4/4/2023 11:25

Sample ID: 23D0511-13

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:18	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	61.3	40-140		4/10/23 22:18
o-Terphenyl (OTP)	61.9	40-140		4/10/23 22:18
2-Bromonaphthalene	85.9	40-140		4/10/23 22:18
2-Fluorobiphenyl	84.0	40-140		4/10/23 22:18

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 6 ft | Sampled: 4/4/2023 11:25

Sample ID: 23D0511-13

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.99

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
C5-C8 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
Unadjusted C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
C9-C10 Aromatics	ND	12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
Benzene	ND	0.062	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
Ethylbenzene	ND	0.062	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.062	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
Naphthalene	ND	0.31	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
Toluene	ND	0.062	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
m+p Xylene	ND	0.12	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH
o-Xylene	ND	0.062	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	106	70-130		4/7/23 1:01
2,5-Dibromotoluene (PID)	104	70-130		4/7/23 1:01

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 6 ft | Sampled: 4/4/2023 11:25

Sample ID: 23D0511-13

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	7.2	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:36	ATP

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 6 ft | Sampled: 4/4/2023 11:25

Sample ID: 23D0511-13

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.4		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 11 ft | Sampled: 4/4/2023 13:15

Sample ID: 23D0511-14

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1221 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1232 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1242 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1248 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1254 [2]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1260 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1262 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM
Aroclor-1268 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 21:58	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	102	30-150		4/7/23 21:58
Decachlorobiphenyl [2]	90.8	30-150		4/7/23 21:58
Tetrachloro-m-xylene [1]	85.2	30-150		4/7/23 21:58
Tetrachloro-m-xylene [2]	79.5	30-150		4/7/23 21:58

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 11 ft | Sampled: 4/4/2023 13:15

Sample ID: 23D0511-14

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/10/23 22:38	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	51.6	40-140		4/10/23 22:38
o-Terphenyl (OTP)	56.5	40-140		4/10/23 22:38
2-Bromonaphthalene	82.2	40-140		4/10/23 22:38
2-Fluorobiphenyl	80.3	40-140		4/10/23 22:38

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 11 ft | Sampled: 4/4/2023 13:15

Sample ID: 23D0511-14

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.15

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
Unadjusted C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
C9-C10 Aromatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
Benzene	ND	0.066	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
Ethylbenzene	ND	0.066	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.066	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
Naphthalene	ND	0.33	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
Toluene	ND	0.066	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
m+p Xylene	ND	0.13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH
o-Xylene	ND	0.066	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:30	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	106	70-130		4/7/23 1:30	
2,5-Dibromotoluene (PID)	106	70-130		4/7/23 1:30	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA Sample Description: Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 11 ft Sampled: 4/4/2023 13:15

Sample ID: 23D0511-14

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	19	3.7	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 0:43	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 11 ft | Sampled: 4/4/2023 13:15

Sample ID: 23D0511-14

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.6		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 16 ft | Sampled: 4/4/2023 13:25

Sample ID: 23D0511-15

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1221 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1232 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1242 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1248 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1254 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1260 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1262 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM
Aroclor-1268 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:15	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	103	30-150		4/7/23 22:15
Decachlorobiphenyl [2]	90.6	30-150		4/7/23 22:15
Tetrachloro-m-xylene [1]	88.3	30-150		4/7/23 22:15
Tetrachloro-m-xylene [2]	82.2	30-150		4/7/23 22:15

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 16 ft | Sampled: 4/4/2023 13:25

Sample ID: 23D0511-15

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 13:55	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	65.3	40-140		4/11/23 13:55
o-Terphenyl (OTP)	61.0	40-140		4/11/23 13:55
2-Bromonaphthalene	68.5	40-140		4/11/23 13:55
2-Fluorobiphenyl	67.4	40-140		4/11/23 13:55

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 16 ft | Sampled: 4/4/2023 13:25

Sample ID: 23D0511-15

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.97

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
Unadjusted C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
C9-C10 Aromatics	ND	11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
Benzene	ND	0.054	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
Ethylbenzene	ND	0.054	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.054	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
Naphthalene	ND	0.27	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
Toluene	ND	0.054	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH
o-Xylene	ND	0.054	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 1:59	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	106	70-130		4/7/23 1:59
2,5-Dibromotoluene (PID)	107	70-130		4/7/23 1:59

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 16 ft | Sampled: 4/4/2023 13:25

Sample ID: 23D0511-15

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	3.7	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 1:03	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-5 16 ft | Sampled: 4/4/2023 13:25

Sample ID: 23D0511-15

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.6		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 6 ft | Sampled: 4/4/2023 13:05

Sample ID: 23D0511-16

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1221 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1232 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1242 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1248 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1254 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1260 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1262 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM
Aroclor-1268 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:32	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	103	30-150		4/7/23 22:32
Decachlorobiphenyl [2]	91.5	30-150		4/7/23 22:32
Tetrachloro-m-xylene [1]	89.0	30-150		4/7/23 22:32
Tetrachloro-m-xylene [2]	82.8	30-150		4/7/23 22:32

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 6 ft | Sampled: 4/4/2023 13:05

Sample ID: 23D0511-16

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:14	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	71.3	40-140		4/11/23 14:14
o-Terphenyl (OTP)	66.9	40-140		4/11/23 14:14
2-Bromonaphthalene	80.5	40-140		4/11/23 14:14
2-Fluorobiphenyl	79.2	40-140		4/11/23 14:14

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 6 ft | Sampled: 4/4/2023 13:05

Sample ID: 23D0511-16

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.96

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
Unadjusted C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
C9-C10 Aromatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
Benzene	ND	0.067	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
Ethylbenzene	ND	0.067	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.067	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
Naphthalene	ND	0.34	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
Toluene	ND	0.067	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
m+p Xylene	ND	0.13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH
o-Xylene	ND	0.067	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:29	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,5-Dibromotoluene (FID)	110	70-130		4/7/23 2:29
2,5-Dibromotoluene (PID)	110	70-130		4/7/23 2:29

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 6 ft | Sampled: 4/4/2023 13:05

Sample ID: 23D0511-16

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	8.3	3.7	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 1:10	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA Sample Description: Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 6 ft Sampled: 4/4/2023 13:05

Sample ID: 23D0511-16

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.8		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 11 ft | Sampled: 4/4/2023 13:45

Sample ID: 23D0511-17

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1221 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1232 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1242 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1248 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1254 [2]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1260 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1262 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM
Aroclor-1268 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 22:49	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	101	30-150		4/7/23 22:49
Decachlorobiphenyl [2]	90.0	30-150		4/7/23 22:49
Tetrachloro-m-xylene [1]	84.6	30-150		4/7/23 22:49
Tetrachloro-m-xylene [2]	79.8	30-150		4/7/23 22:49

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 11 ft | Sampled: 4/4/2023 13:45

Sample ID: 23D0511-17

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Chrysene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Fluorene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB
Pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:33	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	69.9	40-140		4/11/23 14:33
o-Terphenyl (OTP)	69.4	40-140		4/11/23 14:33
2-Bromonaphthalene	93.1	40-140		4/11/23 14:33
2-Fluorobiphenyl	92.0	40-140		4/11/23 14:33

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 11 ft | Sampled: 4/4/2023 13:45

Sample ID: 23D0511-17

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.94

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
C5-C8 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
Unadjusted C9-C12 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
C9-C12 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
C9-C10 Aromatics	ND	14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
Benzene	ND	0.069	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
Ethylbenzene	ND	0.069	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.069	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
Naphthalene	ND	0.34	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
Toluene	ND	0.069	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
m+p Xylene	ND	0.14	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH
o-Xylene	ND	0.069	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 2:59	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	102	70-130			4/7/23 2:59
2,5-Dibromotoluene (PID)	102	70-130			4/7/23 2:59

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 11 ft | Sampled: 4/4/2023 13:45

Sample ID: 23D0511-17

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	3.8	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 1:17	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 11 ft | Sampled: 4/4/2023 13:45

Sample ID: 23D0511-17

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.2		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 16 ft | Sampled: 4/4/2023 13:55

Sample ID: 23D0511-18

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1221 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1232 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1242 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1248 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1254 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1260 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1262 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM
Aroclor-1268 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	4/6/23	4/7/23 23:06	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	105	30-150		4/7/23 23:06
Decachlorobiphenyl [2]	93.0	30-150		4/7/23 23:06
Tetrachloro-m-xylene [1]	92.6	30-150		4/7/23 23:06
Tetrachloro-m-xylene [2]	86.8	30-150		4/7/23 23:06

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Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 16 ft | Sampled: 4/4/2023 13:55

Sample ID: 23D0511-18

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	4/6/23	4/11/23 14:53	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	71.5	40-140		4/11/23 14:53
o-Terphenyl (OTP)	59.0	40-140		4/11/23 14:53
2-Bromonaphthalene	78.1	40-140		4/11/23 14:53
2-Fluorobiphenyl	77.0	40-140		4/11/23 14:53

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 16 ft | Sampled: 4/4/2023 13:55

Sample ID: 23D0511-18

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.13

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
C5-C8 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
Unadjusted C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
C9-C12 Aliphatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
C9-C10 Aromatics	ND	13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
Benzene	ND	0.064	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
Ethylbenzene	ND	0.064	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.064	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
Naphthalene	ND	0.32	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
Toluene	ND	0.064	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
m+p Xylene	ND	0.13	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH
o-Xylene	ND	0.064	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	4/6/23	4/7/23 3:28	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
2,5-Dibromotoluene (FID)	97.6	70-130		4/7/23	3:28
2,5-Dibromotoluene (PID)	96.7	70-130		4/7/23	3:28

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 16 ft | Sampled: 4/4/2023 13:55

Sample ID: 23D0511-18

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	4.4	3.6	mg/Kg dry	1		SW-846 6010D	4/6/23	4/8/23 1:25	ATP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St, Andover, MA | Sample Description: | Work Order: 23D0511

Date Received: 4/5/2023

Field Sample #: SB-6 16 ft | Sampled: 4/4/2023 13:55

Sample ID: 23D0511-18

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.1		% Wt	1		SM 2540G	4/6/23	4/6/23 7:54	WDC

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Sample Extraction Data

Prep Method: SW-846 3546 **Analytical Method: MADEP EPH rev 2.1**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23D0511-01 [SB-1 6 ft]	B336385	20.1	2.00	04/06/23
23D0511-01RE1 [SB-1 6 ft]	B336385	20.1	2.00	04/06/23
23D0511-02 [SB-1 11ft]	B336385	20.2	2.00	04/06/23
23D0511-02RE1 [SB-1 11ft]	B336385	20.2	2.00	04/06/23
23D0511-03 [SB-1 16 ft]	B336385	20.0	2.00	04/06/23
23D0511-04 [SB-2 6 ft]	B336385	20.1	2.00	04/06/23
23D0511-04RE1 [SB-2 6 ft]	B336385	20.1	2.00	04/06/23
23D0511-05 [SB-2 11 ft]	B336385	20.0	2.00	04/06/23
23D0511-06 [SB-2 16 ft]	B336385	20.1	2.00	04/06/23
23D0511-06RE1 [SB-2 16 ft]	B336385	20.1	2.00	04/06/23
23D0511-07 [SB-3 6 ft]	B336385	20.0	2.00	04/06/23
23D0511-08 [SB-3 11 ft]	B336385	20.2	2.00	04/06/23
23D0511-09 [SB-3 16 ft]	B336385	20.1	2.00	04/06/23
23D0511-10 [SB-4 6 ft]	B336385	20.2	2.00	04/06/23
23D0511-11 [SB-4 11ft]	B336385	20.0	2.00	04/06/23
23D0511-12 [SB-4 16 ft]	B336385	20.1	2.00	04/06/23
23D0511-13 [SB-5 6 ft]	B336385	20.1	2.00	04/06/23
23D0511-14 [SB-5 11 ft]	B336385	20.2	2.00	04/06/23
23D0511-15 [SB-5 16 ft]	B336385	20.0	2.00	04/06/23
23D0511-16 [SB-6 6 ft]	B336385	20.1	2.00	04/06/23
23D0511-17 [SB-6 11 ft]	B336385	20.0	2.00	04/06/23
23D0511-18 [SB-6 16 ft]	B336385	20.0	2.00	04/06/23

Prep Method: MA VPH **Analytical Method: MADEP-VPH-Feb 2018 Rev 2.1**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23D0511-01 [SB-1 6 ft]	B336361	13.8	16.1	04/06/23
23D0511-02 [SB-1 11ft]	B336361	16.3	17.2	04/06/23
23D0511-03 [SB-1 16 ft]	B336361	14.9	16.4	04/06/23
23D0511-03RE1 [SB-1 16 ft]	B336361	14.9	16.4	04/06/23
23D0511-04 [SB-2 6 ft]	B336361	16.5	16.0	04/06/23
23D0511-05 [SB-2 11 ft]	B336361	16.8	17.0	04/06/23
23D0511-06 [SB-2 16 ft]	B336361	13.7	16.3	04/06/23
23D0511-07 [SB-3 6 ft]	B336361	15.2	16.2	04/06/23
23D0511-08 [SB-3 11 ft]	B336361	17.0	18.5	04/06/23
23D0511-09 [SB-3 16 ft]	B336361	16.2	16.8	04/06/23
23D0511-10 [SB-4 6 ft]	B336361	14.6	15.5	04/06/23
23D0511-11 [SB-4 11ft]	B336361	14.6	16.7	04/06/23
23D0511-12 [SB-4 16 ft]	B336361	14.9	16.8	04/06/23
23D0511-13 [SB-5 6 ft]	B336361	14.1	16.1	04/06/23
23D0511-14 [SB-5 11 ft]	B336361	14.8	17.0	04/06/23
23D0511-15 [SB-5 16 ft]	B336361	17.3	16.8	04/06/23
23D0511-16 [SB-6 6 ft]	B336361	14.5	16.9	04/06/23
23D0511-17 [SB-6 11 ft]	B336361	14.4	17.0	04/06/23
23D0511-18 [SB-6 16 ft]	B336361	14.1	16.4	04/06/23

Prep Method: % Solids **Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
23D0511-01 [SB-1 6 ft]	B336354	04/06/23
23D0511-02 [SB-1 11ft]	B336354	04/06/23
23D0511-03 [SB-1 16 ft]	B336354	04/06/23
23D0511-04 [SB-2 6 ft]	B336354	04/06/23

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Sample Extraction Data

Prep Method: % Solids **Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
23D0511-05 [SB-2 11 ft]	B336354	04/06/23
23D0511-06 [SB-2 16 ft]	B336354	04/06/23
23D0511-07 [SB-3 6 ft]	B336354	04/06/23
23D0511-08 [SB-3 11 ft]	B336354	04/06/23
23D0511-09 [SB-3 16 ft]	B336354	04/06/23
23D0511-10 [SB-4 6 ft]	B336354	04/06/23
23D0511-11 [SB-4 11ft]	B336354	04/06/23
23D0511-12 [SB-4 16 ft]	B336354	04/06/23
23D0511-13 [SB-5 6 ft]	B336354	04/06/23
23D0511-14 [SB-5 11 ft]	B336354	04/06/23
23D0511-15 [SB-5 16 ft]	B336354	04/06/23
23D0511-16 [SB-6 6 ft]	B336354	04/06/23
23D0511-17 [SB-6 11 ft]	B336354	04/06/23
23D0511-18 [SB-6 16 ft]	B336354	04/06/23

Prep Method: SW-846 3050B **Analytical Method: SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23D0511-01 [SB-1 6 ft]	B336368	1.58	50.0	04/06/23
23D0511-02 [SB-1 11ft]	B336368	1.55	50.0	04/06/23
23D0511-03 [SB-1 16 ft]	B336368	1.53	50.0	04/06/23
23D0511-04 [SB-2 6 ft]	B336368	1.51	50.0	04/06/23
23D0511-05 [SB-2 11 ft]	B336368	1.52	50.0	04/06/23
23D0511-06 [SB-2 16 ft]	B336368	1.54	50.0	04/06/23
23D0511-07 [SB-3 6 ft]	B336368	1.50	50.0	04/06/23
23D0511-08 [SB-3 11 ft]	B336368	1.54	50.0	04/06/23
23D0511-09 [SB-3 16 ft]	B336368	1.58	50.0	04/06/23
23D0511-10 [SB-4 6 ft]	B336368	1.52	50.0	04/06/23
23D0511-11 [SB-4 11ft]	B336368	1.57	50.0	04/06/23
23D0511-12 [SB-4 16 ft]	B336368	1.52	50.0	04/06/23
23D0511-13 [SB-5 6 ft]	B336368	1.51	50.0	04/06/23
23D0511-14 [SB-5 11 ft]	B336368	1.57	50.0	04/06/23
23D0511-15 [SB-5 16 ft]	B336368	1.51	50.0	04/06/23
23D0511-16 [SB-6 6 ft]	B336368	1.54	50.0	04/06/23
23D0511-17 [SB-6 11 ft]	B336368	1.51	50.0	04/06/23
23D0511-18 [SB-6 16 ft]	B336368	1.54	50.0	04/06/23

Prep Method: SW-846 3540C **Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23D0511-01 [SB-1 6 ft]	B336357	10.0	10.0	04/06/23
23D0511-02 [SB-1 11ft]	B336357	10.0	10.0	04/06/23
23D0511-03 [SB-1 16 ft]	B336357	10.0	10.0	04/06/23
23D0511-04 [SB-2 6 ft]	B336357	10.0	10.0	04/06/23
23D0511-05 [SB-2 11 ft]	B336357	10.0	10.0	04/06/23
23D0511-06 [SB-2 16 ft]	B336357	10.0	10.0	04/06/23
23D0511-07 [SB-3 6 ft]	B336357	10.0	10.0	04/06/23
23D0511-08 [SB-3 11 ft]	B336357	10.0	10.0	04/06/23
23D0511-09 [SB-3 16 ft]	B336357	10.0	10.0	04/06/23
23D0511-10 [SB-4 6 ft]	B336357	10.0	10.0	04/06/23
23D0511-11 [SB-4 11ft]	B336357	10.0	10.0	04/06/23
23D0511-12 [SB-4 16 ft]	B336357	10.0	10.0	04/06/23
23D0511-13 [SB-5 6 ft]	B336357	10.0	10.0	04/06/23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3540C **Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23D0511-14 [SB-5 11 ft]	B336357	10.0	10.0	04/06/23
23D0511-15 [SB-5 16 ft]	B336357	10.0	10.0	04/06/23
23D0511-16 [SB-6 6 ft]	B336357	10.0	10.0	04/06/23
23D0511-17 [SB-6 11 ft]	B336357	10.0	10.0	04/06/23
23D0511-18 [SB-6 16 ft]	B336357	10.0	10.0	04/06/23

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336357 - SW-846 3540C										
Blank (B336357-BLK1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.189*		mg/Kg wet	0.200		94.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.175*		mg/Kg wet	0.200		87.4	30-150			
Surrogate: Tetrachloro-m-xylene	*0.187*		mg/Kg wet	0.200		93.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.180*		mg/Kg wet	0.200		90.2	30-150			
LCS (B336357-BS1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Aroclor-1016	0.16	0.020	mg/Kg wet	0.200		78.9	40-140			
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		82.5	40-140			
Aroclor-1260	0.15	0.020	mg/Kg wet	0.200		76.5	40-140			
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		73.8	40-140			
Surrogate: Decachlorobiphenyl	*0.183*		mg/Kg wet	0.200		91.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.171*		mg/Kg wet	0.200		85.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.167*		mg/Kg wet	0.200		83.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.165*		mg/Kg wet	0.200		82.3	30-150			
LCS Dup (B336357-BSD1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Aroclor-1016	0.16	0.020	mg/Kg wet	0.200		79.0	40-140	0.159	30	
Aroclor-1016 [2C]	0.16	0.020	mg/Kg wet	0.200		81.3	40-140	1.49	30	
Aroclor-1260	0.15	0.020	mg/Kg wet	0.200		76.5	40-140	0.0307	30	
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		74.6	40-140	0.989	30	
Surrogate: Decachlorobiphenyl	*0.184*		mg/Kg wet	0.200		91.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.171*		mg/Kg wet	0.200		85.5	30-150			
Surrogate: Tetrachloro-m-xylene	*0.166*		mg/Kg wet	0.200		82.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.163*		mg/Kg wet	0.200		81.4	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B336357 - SW-846 3540C											
Matrix Spike (B336357-MS1)	**Source: 23D0511-01**			Prepared: 04/06/23 Analyzed: 04/07/23							
Aroclor-1016	0.22	0.087	mg/Kg dry	0.217	ND	100		40-140			
Aroclor-1016 [2C]	0.27	0.087	mg/Kg dry	0.217	ND	125		40-140			
Aroclor-1260	0.58	0.087	mg/Kg dry	0.217	0.13	**204**	*	40-140			MS-21
Aroclor-1260 [2C]	0.51	0.087	mg/Kg dry	0.217	0.17	**158**	*	40-140			MS-21
Surrogate: Decachlorobiphenyl	*0.201*		mg/Kg dry	0.217		92.8		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.189*		mg/Kg dry	0.217		87.2		30-150			
Surrogate: Tetrachloro-m-xylene	*0.204*		mg/Kg dry	0.217		94.1		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.192*		mg/Kg dry	0.217		88.5		30-150			
Matrix Spike Dup (B336357-MSD1)	**Source: 23D0511-01**			Prepared: 04/06/23 Analyzed: 04/07/23							
Aroclor-1016	0.22	0.087	mg/Kg dry	0.217	ND	100		40-140	0.375	50	
Aroclor-1016 [2C]	0.27	0.087	mg/Kg dry	0.217	ND	123		40-140	1.14	50	
Aroclor-1260	0.56	0.087	mg/Kg dry	0.217	0.13	**199**	*	40-140	2.20	50	MS-21
Aroclor-1260 [2C]	0.50	0.087	mg/Kg dry	0.217	0.17	**153**	*	40-140	1.92	50	MS-21
Surrogate: Decachlorobiphenyl	*0.201*		mg/Kg dry	0.217		92.6		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.190*		mg/Kg dry	0.217		87.5		30-150			
Surrogate: Tetrachloro-m-xylene	*0.202*		mg/Kg dry	0.217		93.0		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.191*		mg/Kg dry	0.217		88.1		30-150			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336385 - SW-846 3546										
Blank (B336385-BLK1)				Prepared: 04/06/23 Analyzed: 04/10/23						
C9-C18 Aliphatics	ND	9.9	mg/Kg wet							
C19-C36 Aliphatics	ND	9.9	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	9.9	mg/Kg wet							
C11-C22 Aromatics	ND	9.9	mg/Kg wet							
Acenaphthene	ND	0.099	mg/Kg wet							
Acenaphthylene	ND	0.099	mg/Kg wet							
Anthracene	ND	0.099	mg/Kg wet							
Benzo(a)anthracene	ND	0.099	mg/Kg wet							
Benzo(a)pyrene	ND	0.099	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.099	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.099	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.099	mg/Kg wet							
Chrysene	ND	0.099	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.099	mg/Kg wet							
Fluoranthene	ND	0.099	mg/Kg wet							
Fluorene	ND	0.099	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.099	mg/Kg wet							
2-Methylnaphthalene	ND	0.099	mg/Kg wet							
Naphthalene	ND	0.099	mg/Kg wet							
Phenanthrene	ND	0.099	mg/Kg wet							
Pyrene	ND	0.099	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.099	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.099	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	*2.94*		mg/Kg wet	4.95		59.4	40-140			
Surrogate: o-Terphenyl (OTP)	*3.47*		mg/Kg wet	4.95		70.1	40-140			
Surrogate: 2-Bromonaphthalene	*4.51*		mg/Kg wet	4.95		91.1	40-140			
Surrogate: 2-Fluorobiphenyl	*4.46*		mg/Kg wet	4.95		90.2	40-140			
LCS (B336385-BS1)				Prepared: 04/06/23 Analyzed: 04/10/23						
C9-C18 Aliphatics	24.2	10	mg/Kg wet	29.9		80.9	40-140			
C19-C36 Aliphatics	34.9	10	mg/Kg wet	39.8		87.6	40-140			
Unadjusted C11-C22 Aromatics	67.2	10	mg/Kg wet	84.6		79.4	40-140			
Acenaphthene	3.77	0.10	mg/Kg wet	4.98		75.7	40-140			
Acenaphthylene	3.46	0.10	mg/Kg wet	4.98		69.6	40-140			
Anthracene	3.83	0.10	mg/Kg wet	4.98		77.1	40-140			
Benzo(a)anthracene	3.81	0.10	mg/Kg wet	4.98		76.5	40-140			
Benzo(a)pyrene	3.83	0.10	mg/Kg wet	4.98		76.9	40-140			
Benzo(b)fluoranthene	3.67	0.10	mg/Kg wet	4.98		73.7	40-140			
Benzo(g,h,i)perylene	3.50	0.10	mg/Kg wet	4.98		70.3	40-140			
Benzo(k)fluoranthene	3.54	0.10	mg/Kg wet	4.98		71.1	40-140			
Chrysene	4.05	0.10	mg/Kg wet	4.98		81.5	40-140			
Dibenz(a,h)anthracene	3.71	0.10	mg/Kg wet	4.98		74.6	40-140			
Fluoranthene	3.74	0.10	mg/Kg wet	4.98		75.1	40-140			
Fluorene	3.84	0.10	mg/Kg wet	4.98		77.3	40-140			
Indeno(1,2,3-cd)pyrene	3.53	0.10	mg/Kg wet	4.98		70.9	40-140			
2-Methylnaphthalene	3.70	0.10	mg/Kg wet	4.98		74.5	40-140			
Naphthalene	3.48	0.10	mg/Kg wet	4.98		70.0	40-140			
Phenanthrene	3.88	0.10	mg/Kg wet	4.98		78.0	40-140			
Pyrene	3.80	0.10	mg/Kg wet	4.98		76.5	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	4.98			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	4.98			0-5			
Surrogate: Chlorooctadecane (COD)	*2.68*		mg/Kg wet	4.98		53.9	40-140			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B336385 - SW-846 3546											
LCS (B336385-BS1)				Prepared: 04/06/23 Analyzed: 04/10/23							
Surrogate: o-Terphenyl (OTP)	*3.42*		mg/Kg wet	4.98		68.7		40-140			
Surrogate: 2-Bromonaphthalene	*4.54*		mg/Kg wet	4.98		91.2		40-140			
Surrogate: 2-Fluorobiphenyl	*4.51*		mg/Kg wet	4.98		90.7		40-140			
LCS Dup (B336385-BSD1)				Prepared: 04/06/23 Analyzed: 04/10/23							
C9-C18 Aliphatics	21.8	10	mg/Kg wet	30.0		72.5		40-140	10.4	25	
C19-C36 Aliphatics	33.2	10	mg/Kg wet	40.0		82.9		40-140	4.97	25	
Unadjusted C11-C22 Aromatics	60.6	10	mg/Kg wet	85.0		71.2		40-140	10.4	25	
Acenaphthene	3.34	0.10	mg/Kg wet	5.00		66.8		40-140	12.0	25	
Acenaphthylene	3.06	0.10	mg/Kg wet	5.00		61.2		40-140	12.4	25	
Anthracene	3.44	0.10	mg/Kg wet	5.00		68.7		40-140	11.0	25	
Benzo(a)anthracene	3.44	0.10	mg/Kg wet	5.00		68.7		40-140	10.3	25	
Benzo(a)pyrene	3.46	0.10	mg/Kg wet	5.00		69.2		40-140	10.1	25	
Benzo(b)fluoranthene	3.31	0.10	mg/Kg wet	5.00		66.2		40-140	10.2	25	
Benzo(g,h,i)perylene	3.17	0.10	mg/Kg wet	5.00		63.4		40-140	9.79	25	
Benzo(k)fluoranthene	3.20	0.10	mg/Kg wet	5.00		64.0		40-140	10.0	25	
Chrysene	3.66	0.10	mg/Kg wet	5.00		73.2		40-140	10.2	25	
Dibenz(a,h)anthracene	3.35	0.10	mg/Kg wet	5.00		67.0		40-140	10.2	25	
Fluoranthene	3.36	0.10	mg/Kg wet	5.00		67.3		40-140	10.5	25	
Fluorene	3.32	0.10	mg/Kg wet	5.00		66.5		40-140	14.5	25	
Indeno(1,2,3-cd)pyrene	3.18	0.10	mg/Kg wet	5.00		63.6		40-140	10.4	25	
2-Methylnaphthalene	3.21	0.10	mg/Kg wet	5.00		64.1		40-140	14.4	25	
Naphthalene	2.94	0.10	mg/Kg wet	5.00		58.8		40-140	16.8	25	
Phenanthrene	3.50	0.10	mg/Kg wet	5.00		69.9		40-140	10.4	25	
Pyrene	3.44	0.10	mg/Kg wet	5.00		68.8		40-140	10.0	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00				0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00				0-5			
Surrogate: Chlorooctadecane (COD)	*2.53*		mg/Kg wet	5.00		50.5		40-140			
Surrogate: o-Terphenyl (OTP)	*3.02*		mg/Kg wet	5.00		60.3		40-140			
Surrogate: 2-Bromonaphthalene	*3.96*		mg/Kg wet	5.00		79.1		40-140			
Surrogate: 2-Fluorobiphenyl	*3.94*		mg/Kg wet	5.00		78.9		40-140			
Matrix Spike (B336385-MS1)	**Source: 23D0511-07**			Prepared: 04/06/23 Analyzed: 04/11/23							
C9-C18 Aliphatics	31.6	11	mg/Kg dry	32.5	ND	97.2		40-140			
C19-C36 Aliphatics	121	11	mg/Kg dry	43.3	95.9	57.6		40-140			
Unadjusted C11-C22 Aromatics	306	11	mg/Kg dry	92.1	51.7	**276**	*	40-140			MS-23
Acenaphthene	4.85	0.11	mg/Kg dry	5.42	0.118	87.4		40-140			
Acenaphthylene	5.08	0.11	mg/Kg dry	5.42	0.0714	92.4		40-140			
Anthracene	7.78	0.11	mg/Kg dry	5.42	0.252	139		40-140			
Benzo(a)anthracene	10.7	0.11	mg/Kg dry	5.42	0.768	**184**	*	40-140			MS-23
Benzo(a)pyrene	9.95	0.11	mg/Kg dry	5.42	0.833	**168**	*	40-140			MS-23
Benzo(b)fluoranthene	10.6	0.11	mg/Kg dry	5.42	1.02	**176**	*	40-140			MS-23
Benzo(g,h,i)perylene	6.01	0.11	mg/Kg dry	5.42	0.510	102		40-140			
Benzo(k)fluoranthene	6.41	0.11	mg/Kg dry	5.42	0.387	111		40-140			
Chrysene	11.3	0.11	mg/Kg dry	5.42	0.923	**192**	*	40-140			MS-23
Dibenz(a,h)anthracene	4.15	0.11	mg/Kg dry	5.42	0.142	74.1		40-140			
Fluoranthene	22.7	0.11	mg/Kg dry	5.42	1.55	**390**	*	40-140			E, MS-23
Fluorene	6.32	0.11	mg/Kg dry	5.42	0.0991	115		40-140			
Indeno(1,2,3-cd)pyrene	6.61	0.11	mg/Kg dry	5.42	0.526	112		40-140			
2-Methylnaphthalene	4.57	0.11	mg/Kg dry	5.42	0.0443	83.6		40-140			
Naphthalene	4.25	0.11	mg/Kg dry	5.42	0.0715	77.1		40-140			
Phenanthrene	22.6	0.11	mg/Kg dry	5.42	1.09	**397**	*	40-140			E, MS-23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B336385 - SW-846 3546												
Matrix Spike (B336385-MS1)	**Source: 23D0511-07**			Prepared: 04/06/23 Analyzed: 04/11/23								
Pyrene	21.4	0.11	mg/Kg dry	5.42	1.59	**366**	*	40-140				MS-23
Surrogate: Chlorooctadecane (COD)	*3.00*		mg/Kg dry	5.42		55.4		40-140				
Surrogate: o-Terphenyl (OTP)	*4.19*		mg/Kg dry	5.42		77.4		40-140				
Surrogate: 2-Bromonaphthalene	*4.78*		mg/Kg dry	5.42		88.2		40-140				
Surrogate: 2-Fluorobiphenyl	*4.88*		mg/Kg dry	5.42		90.2		40-140				
Matrix Spike Dup (B336385-MSD1)	**Source: 23D0511-07**			Prepared: 04/06/23 Analyzed: 04/11/23								
C9-C18 Aliphatics	27.3	11	mg/Kg dry	32.5	ND	83.9		40-140	14.7		50	
C19-C36 Aliphatics	101	11	mg/Kg dry	43.3	95.9	**11.8**	*	40-140	17.9		50	MS-22
Unadjusted C11-C22 Aromatics	141	11	mg/Kg dry	92.1	51.7	97.0		40-140	**73.8**	*	50	R-06
Acenaphthene	4.66	0.11	mg/Kg dry	5.42	0.118	83.9		40-140	4.07		50	
Acenaphthylene	4.42	0.11	mg/Kg dry	5.42	0.0714	80.3		40-140	13.8		50	
Anthracene	4.75	0.11	mg/Kg dry	5.42	0.252	83.0		40-140	48.5		50	
Benzo(a)anthracene	5.08	0.11	mg/Kg dry	5.42	0.768	79.5		40-140	**71.6**	*	50	R-06
Benzo(a)pyrene	4.86	0.11	mg/Kg dry	5.42	0.833	74.4		40-140	**68.7**	*	50	R-06
Benzo(b)fluoranthene	4.92	0.11	mg/Kg dry	5.42	1.02	71.9		40-140	**72.9**	*	50	R-06
Benzo(g,h,i)perylene	3.91	0.11	mg/Kg dry	5.42	0.510	62.8		40-140	42.4		50	
Benzo(k)fluoranthene	4.22	0.11	mg/Kg dry	5.42	0.387	70.8		40-140	41.2		50	
Chrysene	5.42	0.11	mg/Kg dry	5.42	0.923	83.0		40-140	**70.4**	*	50	R-06
Dibenz(a,h)anthracene	3.86	0.11	mg/Kg dry	5.42	0.142	68.6		40-140	7.36		50	
Fluoranthene	6.08	0.11	mg/Kg dry	5.42	1.55	83.5		40-140	**115**	*	50	R-06
Fluorene	4.72	0.11	mg/Kg dry	5.42	0.0991	85.3		40-140	29.0		50	
Indeno(1,2,3-cd)pyrene	4.06	0.11	mg/Kg dry	5.42	0.526	65.3		40-140	47.7		50	
2-Methylnaphthalene	4.74	0.11	mg/Kg dry	5.42	0.0443	86.7		40-140	3.55		50	
Naphthalene	4.48	0.11	mg/Kg dry	5.42	0.0715	81.4		40-140	5.27		50	
Phenanthrene	5.98	0.11	mg/Kg dry	5.42	1.09	90.3		40-140	**116**	*	50	R-06
Pyrene	6.14	0.11	mg/Kg dry	5.42	1.59	84.0		40-140	**111**	*	50	R-06
Surrogate: Chlorooctadecane (COD)	*2.26*		mg/Kg dry	5.42		41.7		40-140				
Surrogate: o-Terphenyl (OTP)	*4.10*		mg/Kg dry	5.42		75.7		40-140				
Surrogate: 2-Bromonaphthalene	*5.18*		mg/Kg dry	5.42		95.7		40-140				
Surrogate: 2-Fluorobiphenyl	*5.35*		mg/Kg dry	5.42		98.8		40-140				

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336361 - MA VPH										
Blank (B336361-BLK1)				Prepared & Analyzed: 04/06/23						
Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg wet							
C5-C8 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C10 Aromatics	ND	10	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Butylcyclohexane	ND	0.050	mg/Kg wet							
Decane	ND	0.050	mg/Kg wet							
Ethylbenzene	ND	0.050	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
2-Methylpentane	ND	0.050	mg/Kg wet							
Naphthalene	ND	0.25	mg/Kg wet							
Nonane	ND	0.050	mg/Kg wet							
Pentane	ND	0.050	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
2,2,4-Trimethylpentane	ND	0.050	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							
Surrogate: 2,5-Dibromotoluene (FID)	*38.1*		µg/L	40.0		95.2	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*39.2*		µg/L	40.0		98.0	70-130			
LCS (B336361-BS1)				Prepared & Analyzed: 04/06/23						
Unadjusted C5-C8 Aliphatics	7.57	10	mg/Kg wet	7.50		101	70-130			
Unadjusted C9-C12 Aliphatics	7.53	10	mg/Kg wet	7.50		100	70-130			
C9-C10 Aromatics	2.54	10	mg/Kg wet	2.50		101	70-130			
Benzene	2.67	0.050	mg/Kg wet	2.50		107	70-130			
Butylcyclohexane	2.72	0.050	mg/Kg wet	2.50		109	70-130			
Decane	2.04	0.050	mg/Kg wet	2.50		81.7	70-130			
Ethylbenzene	2.59	0.050	mg/Kg wet	2.50		103	70-130			
Methyl tert-Butyl Ether (MTBE)	2.53	0.050	mg/Kg wet	2.50		101	70-130			
2-Methylpentane	2.65	0.050	mg/Kg wet	2.50		106	70-130			
Naphthalene	1.95	0.25	mg/Kg wet	2.50		77.9	70-130			
Nonane	2.77	0.050	mg/Kg wet	2.50		111	30-130			
Pentane	2.50	0.050	mg/Kg wet	2.50		100	70-130			
Toluene	2.61	0.050	mg/Kg wet	2.50		104	70-130			
1,2,4-Trimethylbenzene	2.54	0.050	mg/Kg wet	2.50		101	70-130			
2,2,4-Trimethylpentane	2.42	0.050	mg/Kg wet	2.50		96.8	70-130			
m+p Xylene	5.14	0.10	mg/Kg wet	5.00		103	70-130			
o-Xylene	2.59	0.050	mg/Kg wet	2.50		104	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	*45.4*		µg/L	40.0		114	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*46.0*		µg/L	40.0		115	70-130			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336361 - MA VPH										
LCS Dup (B336361-BSD1)				Prepared & Analyzed: 04/06/23						
Unadjusted C5-C8 Aliphatics	7.65	10	mg/Kg wet	7.50		102	70-130	1.09	25	
Unadjusted C9-C12 Aliphatics	7.61	10	mg/Kg wet	7.50		101	70-130	1.07	25	
C9-C10 Aromatics	2.58	10	mg/Kg wet	2.50		103	70-130	1.78	25	
Benzene	2.73	0.050	mg/Kg wet	2.50		109	70-130	2.22	25	
Butylcyclohexane	2.74	0.050	mg/Kg wet	2.50		110	70-130	0.777	25	
Decane	2.08	0.050	mg/Kg wet	2.50		83.1	70-130	1.67	25	
Ethylbenzene	2.67	0.050	mg/Kg wet	2.50		107	70-130	3.02	25	
Methyl tert-Butyl Ether (MTBE)	2.61	0.050	mg/Kg wet	2.50		104	70-130	2.89	25	
2-Methylpentane	2.71	0.050	mg/Kg wet	2.50		109	70-130	2.46	25	
Naphthalene	2.03	0.25	mg/Kg wet	2.50		81.3	70-130	4.31	25	
Nonane	2.79	0.050	mg/Kg wet	2.50		112	30-130	0.926	25	
Pentane	2.45	0.050	mg/Kg wet	2.50		98.1	70-130	1.99	25	
Toluene	2.67	0.050	mg/Kg wet	2.50		107	70-130	2.37	25	
1,2,4-Trimethylbenzene	2.58	0.050	mg/Kg wet	2.50		103	70-130	1.78	25	
2,2,4-Trimethylpentane	2.49	0.050	mg/Kg wet	2.50		99.4	70-130	2.70	25	
m+p Xylene	5.28	0.10	mg/Kg wet	5.00		106	70-130	2.66	25	
o-Xylene	2.64	0.050	mg/Kg wet	2.50		106	70-130	1.88	25	
Surrogate: 2,5-Dibromotoluene (FID)	*47.7*		µg/L	40.0		119	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*48.4*		µg/L	40.0		121	70-130			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336368 - SW-846 3050B										
Blank (B336368-BLK1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Arsenic	ND	3.2	mg/Kg wet							
LCS (B336368-BS1)				Prepared: 04/06/23 Analyzed: 04/08/23						
Arsenic	158	9.9	mg/Kg wet	183		86.1	83.1-116.9			
LCS Dup (B336368-BSD1)				Prepared: 04/06/23 Analyzed: 04/08/23						
Arsenic	159	10	mg/Kg wet	183		86.8	83.1-116.9	0.845	30	
Duplicate (B336368-DUP1)	**Source: 23D0511-01**			Prepared: 04/06/23 Analyzed: 04/07/23						
Arsenic	27.8	3.5	mg/Kg dry		26.2			6.02	35	
Matrix Spike (B336368-MS1)	**Source: 23D0511-01**			Prepared: 04/06/23 Analyzed: 04/07/23						
Arsenic	44.8	3.5	mg/Kg dry	17.7	26.2	105	75-125			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SB-1 6 ft

Lab Sample ID: 23D0511-01 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	-0.030	0.030	1.1	
	2	0.000	-0.030	0.030	1.0	9.5
Aroclor-1260	1	0.000	-0.030	0.030	0.13	
	2	0.000	-0.030	0.030	0.17	26.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SB-1 11ft

Lab Sample ID: 23D0511-02 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	-0.030	0.030	0.67	
	2	0.000	-0.030	0.030	0.66	1.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SB-2 6 ft

Lab Sample ID: 23D0511-04 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	-0.030	0.030	0.60	
	2	0.000	-0.030	0.030	0.56	6.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SB-2 11 ft

Lab Sample ID: 23D0511-05 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	-0.030	0.030	0.34	
	2	0.000	-0.030	0.030	0.33	3.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SB-3 6 ft

Lab Sample ID: 23D0511-07

Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11

Instrument ID (2): ECD11

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	-0.030	0.030	0.25	
	2	0.000	-0.030	0.030	0.24	4.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B336357-BS1 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.17	6.1
Aroclor-1260	1	0.000	-0.030	0.030	0.15	
	2	0.000	-0.030	0.030	0.15	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B336357-BSD1 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.16	0.0
Aroclor-1260	1	0.000	-0.030	0.030	0.15	
	2	0.000	-0.030	0.030	0.15	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B336357-MS1 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.22	
	2	0.000	-0.030	0.030	0.27	20.4
Aroclor-1260	1	0.000	-0.030	0.030	0.58	
	2	0.000	-0.030	0.030	0.51	12.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B336357-MSD1 Date(s) Analyzed: 04/07/2023 04/07/2023

Instrument ID (1): ECD11 Instrument ID (2): ECD11

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.22	
	2	0.000	-0.030	0.030	0.27	20.4
Aroclor-1260	1	0.000	-0.030	0.030	0.56	
	2	0.000	-0.030	0.030	0.50	13.1

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
E	Reported result is estimated. Value reported over verified calibration range.
MS-21	Matrix spike and/or spike duplicate recovery bias high due to contribution of other Aroclors present in the source sample.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
O-32	A dilution was performed as part of the standard analytical procedure.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-05	Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.
S-08	Duplicate analysis confirmed surrogate failure due to matrix effects.
S-15	Surrogate recovery outside of control limits due to suspected sample matrix interference. Chromatogram(s) is attached.
S-17	Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.
S-19	Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP EPH rev 2.1 in Soil	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
MADEP EPH rev 2.1 in Water	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
MADEP-VPH-Feb 2018 Rev 2.1 in Soil	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-VPH-Feb 2018 Rev 2.1 in Soil	
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
SW-846 6010D in Soil	
Arsenic	CT,NH,NY,ME,VA,NC
SW-846 6010D in Water	
Arsenic	CT,NH,NY,ME,VA,RI,NC
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

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23D0511

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

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CHAIN OF CUSTODY RECORD

Doc # 381 Rev 1_03242017

39 Spruce Street
East Longmeadow, MA 01028

Company Name:	Atlas Technical Consultants LLC
Address:	10 State St., Ste. 100, Woburn, MA
Phone:	401 384-0042
Project Name:	Global Andover
Project Location:	309 Lowell St., Andover, MA
Project Number:	9521488019
Project Manager:	patrick.corcoran@oneatlas.com
Con-Test Quote Name/Number:	Global
Invoice Recipient:	
Sampled By:	Eric Marchese

Requested Turnaround Time
7-Day ☑ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VPH	EPH	Arsenic	PCBs								
								10 M V	10 I G	10 I G	I G								
1	SB-1 6 ft.	4/4/2023	0930		X	S	M	X	X	X	X								
2	SB-1 11Ft.	4/4/2023	1025		X	S	M	X	X	X	X								
3	SB-1 16 ft.	4/4/2023	1045		X	S	M	X	X	X	X								
4	SB-2 6 ft.	4/4/2023	0955		X	S	M	X	X	X	X								
5	SB-2 11 ft.	4/4/2023	1110		X	S	M	X	X	X	X								
6	SB-2 16 ft.	4/4/2023	1115		X	S	M	X	X	X	X								
7	SB-3 6 ft.	4/4/2023	1030		X	S	M	X	X	X	X								
8	SB-3 11 ft.	4/4/2023	1205		X	S	M	X	X	X	X								
9	SB-3 16 ft.	4/4/2023	1225		X	S	M	X	X	X	X								
10	SB-4 6 ft.	4/4/2023	1055		X	S	M	X	X	X	X								

[3] # of Containers
[2] Preservation Code
[3] Container Code

Dissolved Metals Samples
● Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time: 4/5/23 1300
Relinquished by: (signature)	Date/Time: 4/5/23 1810
Received by: (signature) 3.0	Date/Time: 4/5/23 1810
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA: CAM Report, 21J
GW-1 Stds.
GT:
Other:

Special Requirements
☑ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

con-test® ANALYTICAL LABORATORY
www.contestlabs.com
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☑ 21 J / Global ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☑ Soxhlet
☐ Non Soxhlet

Table of Contents

con-test® ANALYTICAL LABORATORY

2310511

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

Doc # 381 Rev 1_03242017

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Company Name:	Atlas Technical Consultants LLC
Address:	10 State St., Ste. 100, Woburn, MA
Phone:	401 384-0042
Project Name:	Global Andover
Project Location:	309 Lowell St., Andover, MA
Project Number:	9521488019
Project Manager:	patrick.corcoran@oneatlas.com
Con-Test Quote Name/Number:	Global
Invoice Recipient:	
Sampled By:	Eric Marchese

Requested Turnaround Time
7-Day ☑ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VPH	EPH	Arsenic	PCBs								# of Containers
								8	8	8									[2] Preservation Code
								m	i	i	i								[3] Container Code
								V	G	G	G								
11	SB-4 11 ft.	4/4/2023	1240		X	S	M	X	X	X	X								
12	SB-4 16 ft.	4/4/2023	1250		X	S	M	X	X	X	X								
13	SB-5 6 ft.	4/4/2023	1125		X	S	M	X	X	X	X								
14	SB-5 11 ft.	4/4/2023	1315		X	S	M	X	X	X	X								
15	SB-5 16 ft.	4/4/2023	1325		X	S	M	X	X	X	X								
16	SB-6 6 ft.	4/4/2023	1305		X	S	M	X	X	X	X								
17	SB-6 11 ft.	4/4/2023	1345		X	S	M	X	X	X	X								
18	SB-6 16 ft.	4/4/2023	1355		X	S	M	X	X	X	X								

Dissolved Metals Samples
● Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
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V = Vial
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Comments:

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H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time: 4/5/23 1300
Relinquished by: (signature)		Date/Time: 4/5/23 1810
Received by: (signature)	3.0	Date/Time: 4/5/23 1810
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements
MA — CAM Report, 21J
GW-1 Stds.
CT

Special Requirements
☑ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Other:

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Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☑ 21 J / Global ☐ School
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Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☑ Soxhlet
☐ Non Soxhlet

Table of Contents

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

ENV-FRM-ELON-0009V02__Sample Receiving Checklist 1-12-

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client Atlas Tech. Con.
Project Global Andover
MCP/RCP Required MCP Req'd
Deliverable Package Req. CAM Report, 21J, GW-1
Location 309 Lowell St, Andover, MA
PWSID# (When Applicable) N/A
Arrival Method:

Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐ _____
Received By / Date / Time DWW 4/5/23 1810
Back-Sheet By / Date / Time DWW 4/5/23 2050
Temperature Method GUN # 3
Temp ☒ < 6° C Actual Temperature 3.0
Rush Samples: Yes (No) Notify _____
Short Hold: Yes (No) Notify _____

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒
Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH: (N/A) ☐ ☐

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative
1L Amber Plastic								
500 mL Amber Plastic								
250 mL Amber Plastic								
Other Amber Clear Plastic								
16oz Amber Clear								
8oz (Amber) Clear	18							
4oz Amber Clear								
2oz Amber Clear								
Col/Bacteria								
Flashpoint								
Plastic Bag								
SOC Kit								
Perchlorate								
Encore								
Frozen								

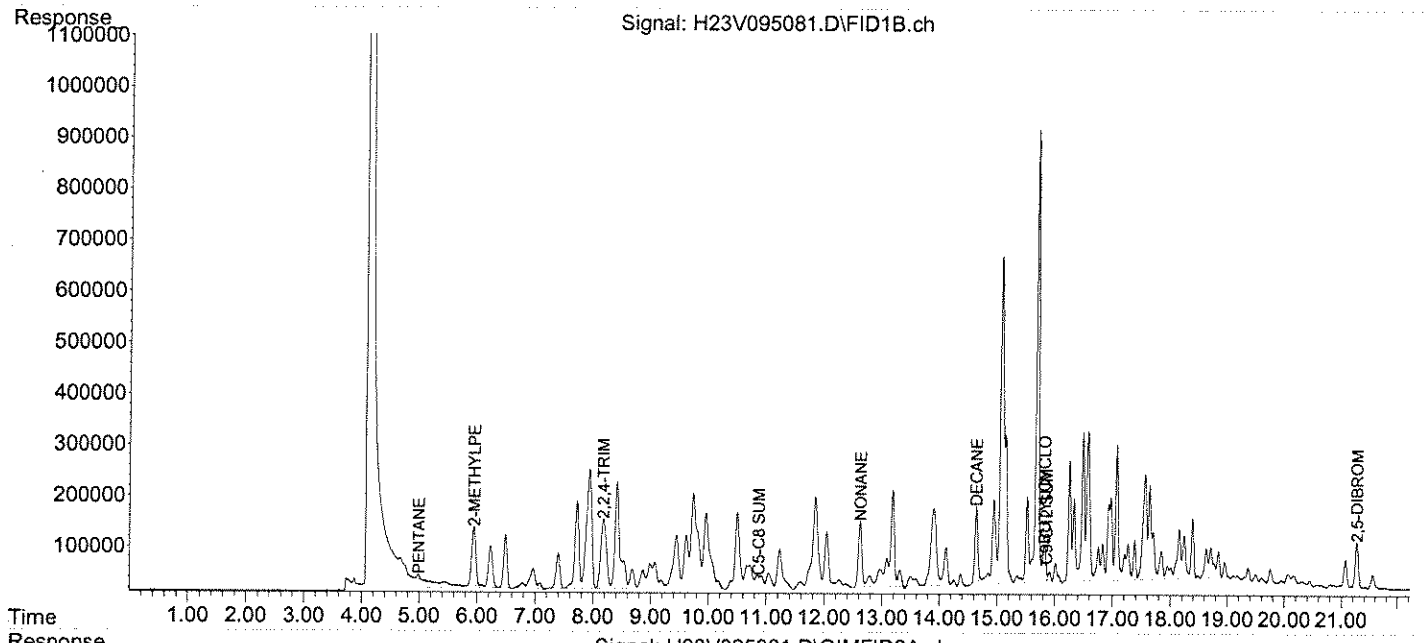
	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials	True			18					

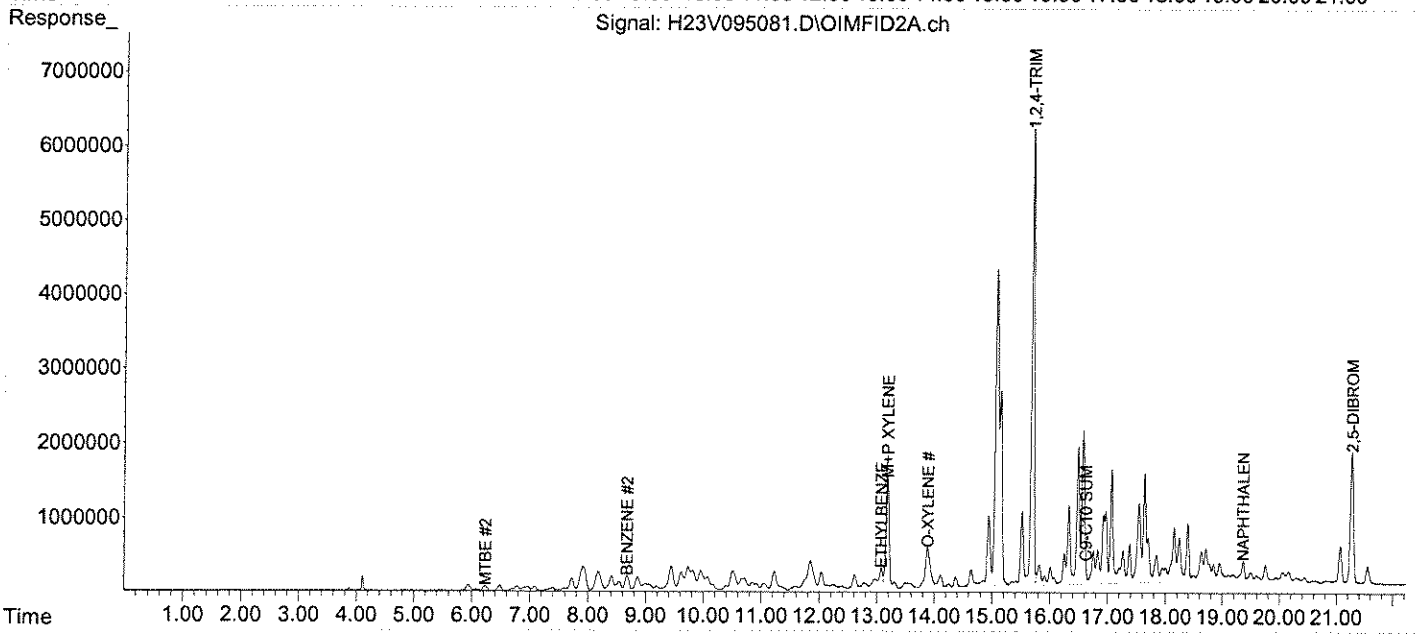
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\040523\
Data File : H23V095081.D
Signal(s) : Signal #1: FID1B.ch Signal #2: OIMFID2A.ch
Acq On : 07 Apr 2023 06:55 am
Operator :
Sample : 23D0511-02 @ 2000X MEOH Inst : VPHGC3
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Apr 07 07:51:06 2023
Quant Method : C:\msdchem\1\methods\VE011823.M
Quant Title : VPHNEW
QLast Update : Wed Apr 05 06:44:32 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



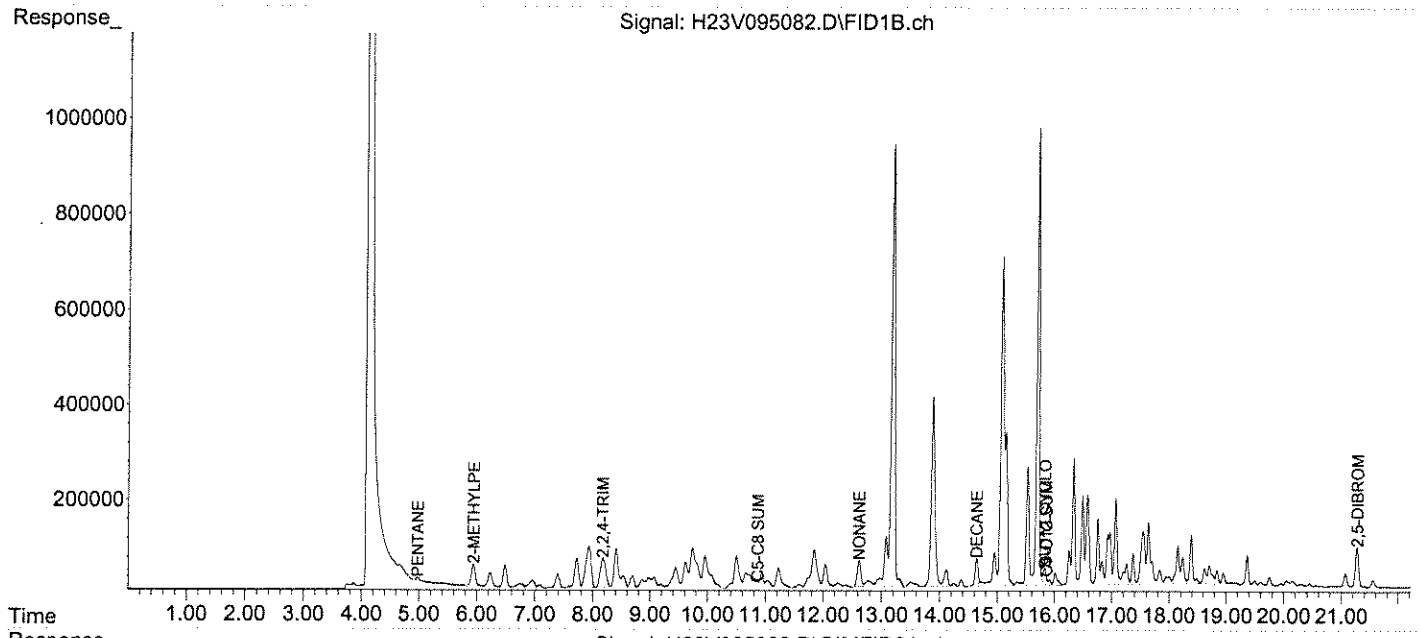


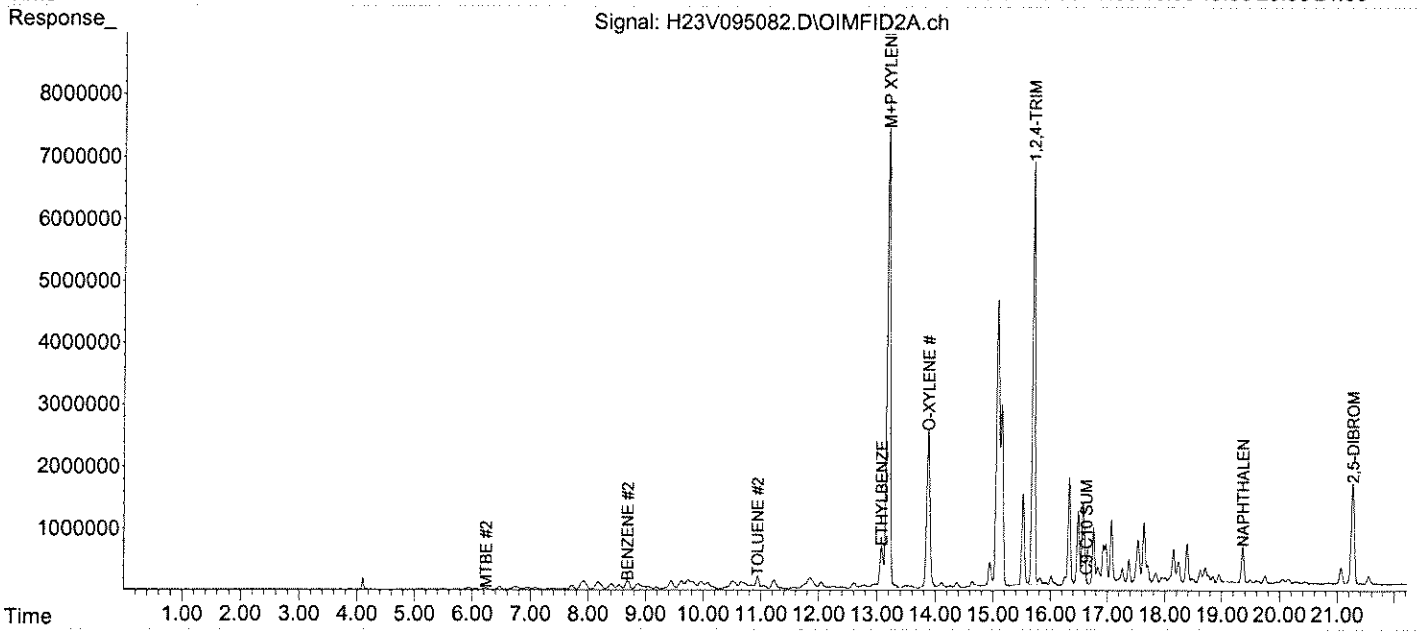
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\040523\
Data File : H23V095082.D
Signal(s) : Signal #1: FID1B.ch Signal #2: OIMFID2A.ch
Acq On : 07 Apr 2023 07:24 am
Operator :
Sample : 23D0511-05 @ 4000X MEOH Inst : VPHGC3
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Apr 07 07:51:36 2023
Quant Method : C:\msdchem\1\methods\VE011823.M
Quant Title : VPHNEW
QLast Update : Wed Apr 05 06:44:32 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



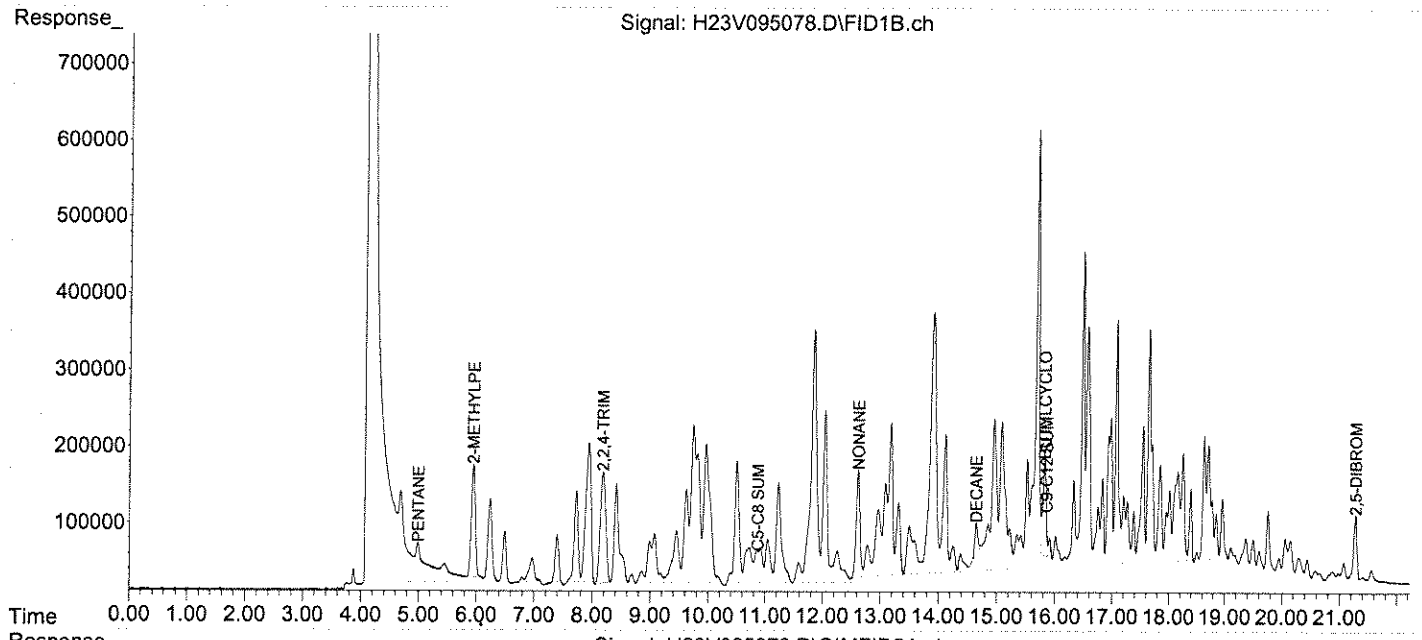


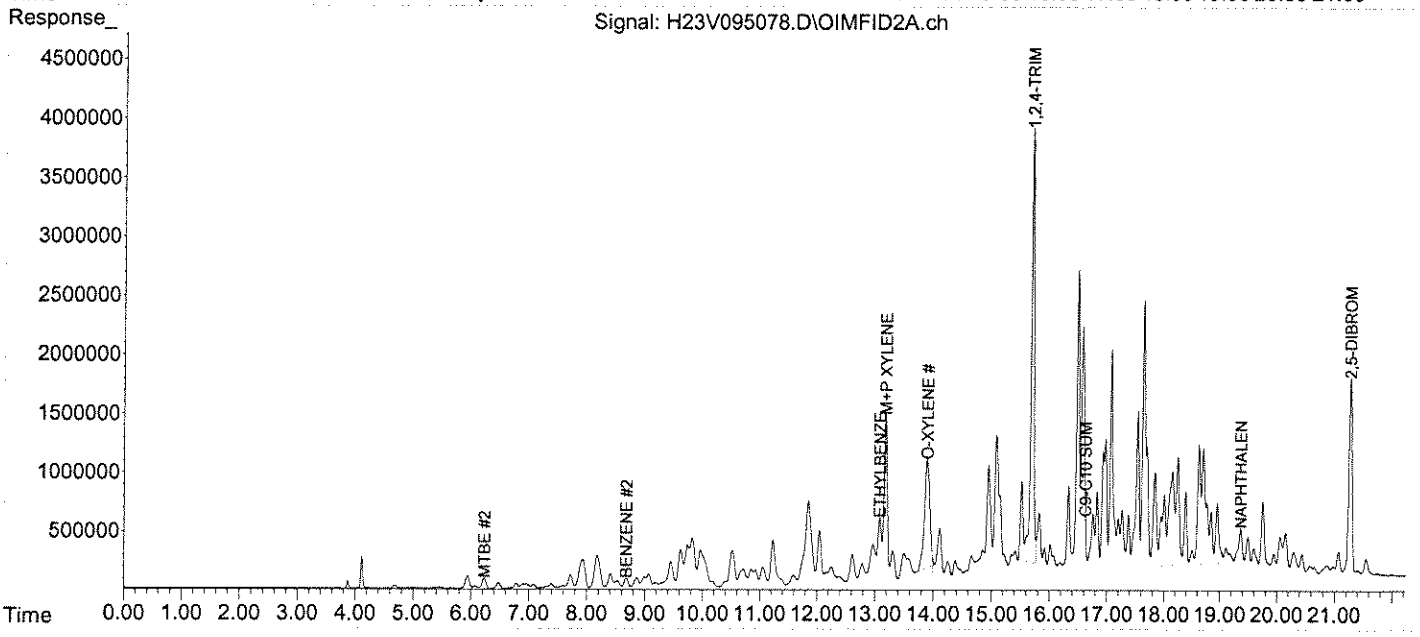
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\040523\
Data File : H23V095078.D
Signal(s) : Signal #1: FID1B.ch Signal #2: OIMFID2A.ch
Acq On : 07 Apr 2023 05:26 am
Operator :
Sample : 23D0511-11 @ 500X MEOH Inst : VPHGC3
Misc :
ALS Vial : 78 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Apr 07 05:57:45 2023
Quant Method : C:\msdchem\1\methods\VE011823.M
Quant Title : VPHNEW
QLast Update : Wed Apr 05 06:44:32 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Pace New England	Project #: 23D0511
Project Location: 309 Lowell St, Andover, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

23D0511-01 thru 23D0511-18

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH (GC/PID/FID) CAM IV A (X)	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP VPH (GC/MS) CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
6010 Metals CAM III A (X)	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B (X)	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes	☑ No[1]

<u>Data User Note:</u> Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Meghan E. Kelley Position: Reporting Specialist

Printed Name: Meghan E. Kelley Date: 04/12/23

APPENDIX F
DRILLING LOGS

BORING/MONITORING WELL LOG

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801
Phone: (781) 932-9400 Fax: (781) 932-6211

SITE:	309 Lowell Street, Andover MA	**WELL/BORING NO.:**	SB-1
DATE:	04/04/2023	**WEATHER:**	Overcast, 50s
CLIENT:	Global	**Atlas INSPECTOR:**	Eric Marchese
DRILLING CO.:	Martin Geo-Environmental	**SURFACE ELEVATION:**	unknown
DRILLING METHOD:	Direct Push Geoprobe	**DEPTH TO WATER:**	~9'
SAMPLER METHOD:	5-foot, 2-inch dia. core barrel polyvinyl tube	**Atlas Project Number:**	9521488019
AUGER DIAMETER:	N/A	**Phase Number:**	3150

Sample Interval	Recovery/ Penetration (in/in)	Blow Counts (per 6")	Headspace (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)
				1		5 inches of asphalt
	N/A			2		Pre clear to 6 feet with vacuum; medium to coarse SAND with trace fine gravel; tan to dark brown; no odor or staining
				3		
				4		
				5		
X			0.0	6		
				7		
	48/60		0.5	8		
				9		medium to coarse SAND; dark brown to black; strong odor and staining
		N/A	558	10		
X				11		
			610	12		
	36/60			13		
			113	14		
			651	15		medium to coarse SAND with trace fine gravel; brown to light brown; no odor or staining
X				16		
			32	17		
	36/60			18		
				19		
				20		
				21		End of boring
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		

Well Construction

	(Depth Interval)
CEMENT SEAL:	N/A
NATURAL FILL	N/A
BENTONITE SEAL	N/A
FILTER SAND	N/A
SOLID PVC RISER	N/A
PVC SCREEN	N/A

COMMENTS:
sampled for VPH, EPH, PCB and total arsenic.
Submitted samples to Pace Analytical

GRANULAR SOILS COHESIVELESS DENSITY

0-4	Very Loose
5-9	Loose
10-29	Medium Dense
30-49	Dense
50+	Very Dense

PROPORTIONS USED

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

BORING/MONITORING WELL LOG

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801
Phone: (781) 932-9400 Fax: (781) 932-6211

SITE:	309 Lowell Street, Andover MA
DATE:	04/04/2023
CLIENT:	Global
DRILLING CO.:	Martin Geo-Environmental
DRILLING METHOD:	Direct Push Geoprobe
SAMPLER METHOD:	5-foot, 2-inch dia. core barrel polyvinyl tube
AUGER DIAMETER:	N/A

WELL/BORING NO.:	SB-2
WEATHER:	Overcast, 50s
Atlas INSPECTOR:	Eric Marchese
SURFACE ELEVATION:	unknown
DEPTH TO WATER:	~9'
Atlas Project Number:	9521488019
Phase Number:	3150

Sample Interval	Recovery/ Penetration (in/in)	Blow Counts (per 6")	Headspace (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)
				1		5 inches of asphalt
	N/A			2		Pre clear to 6 feet with vacuum; medium to coarse SAND with trace fine gravel; tan to dark brown; no odor or staining
				3		
				4		
				5		
X			0.0	6		
				7		
	42/60	N/A	1.3	8		
				9		
				10		
X			815	11		
				12		medium to fine SAND with some fine gravel; dark brown to black, no staining and strong odor
	60/60			13		
			860	14		
				15		
X			415	16		
				17		End of Boring
				18		
				19		
				20		
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		

Well Construction

	(Depth Interval)
CEMENT SEAL:	N/A
NATURAL FILL	N/A
BENTONITE SEAL	N/A
FILTER SAND	N/A
SOLID PVC RISER	N/A
PVC SCREEN	N/A

COMMENTS:
sampled for VPH, EPH, PCB and total arsenic.
Submitted samples to Pace Analytical

GRANULAR SOILS COHESIVELESS DENSITY

0-4	Very Loose
5-9	Loose
10-29	Medium Dense
30-49	Dense
50+	Very Dense

PROPORTIONS USED

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

BORING/MONITORING WELL LOG

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801
Phone: (781) 932-9400 Fax: (781) 932-6211

SITE:	309 Lowell Street, Andover MA
DATE:	04/04/2023
CLIENT:	Global
DRILLING CO.:	Martin Geo-Environmental
DRILLING METHOD:	Direct Push Geoprobe
SAMPLER METHOD:	5-foot, 2-inch dia. core barrel polyvinyl tube
AUGER DIAMETER:	N/A

WELL/BORING NO.:	SB-3
WEATHER:	Overcast, 50s
Atlas INSPECTOR:	Eric Marchese
SURFACE ELEVATION:	unknown
DEPTH TO WATER:	~8.5'
Atlas Project Number:	9521488019
Phase Number:	3150

Sample Interval	Recovery/ Penetration (in/in)	Blow Counts (per 6")	Headspace (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)
				1		5 inches of asphalt
	N/A			2		Pre clear to 6 feet with vacuum; medium to coarse SAND with trace fine gravel, trace brick debris; tan to dark brown; no odor or staining
				3		
				4		
				5		
X			0.0	6		
				7		medium to fine SAND; brown; strong odor and staining
	40/60	N/A	0.0	8		
				9		
				10		
X			0.1	11		fine to coarse SAND trace fine gravel; grey; very mild odor; no staining
				12		
				13		SAND with fine GRAVEL brown to tan; no odor or staining
	60/60		0.1	14		
				15		
X			0.0	16		
				17		End of Boring
				18		
				19		
				20		
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		

Well Construction

	(Depth Interval)
CEMENT SEAL:	N/A
NATURAL FILL	N/A
BENTONITE SEAL	N/A
FILTER SAND	N/A
SOLID PVC RISER	N/A
PVC SCREEN	N/A

COMMENTS:
sampled for VPH, EPH, PCB and total arsenic.
Submitted samples to Pace Analytical

GRANULAR SOILS COHESIVELESS DENSITY

0-4	Very Loose
5-9	Loose
10-29	Medium Dense
30-49	Dense
50+	Very Dense

PROPORTIONS USED

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

BORING/MONITORING WELL LOG

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801
Phone: (781) 932-9400 Fax: (781) 932-6211

SITE:	309 Lowell Street, Andover MA
DATE:	04/04/2023
CLIENT:	Global
DRILLING CO.:	Martin Geo-Environmental
DRILLING METHOD:	Direct Push Geoprobe
SAMPLER METHOD:	5-foot, 2-inch dia. core barrel polyvinyl tube
AUGER DIAMETER:	N/A

WELL/BORING NO.:	SB-4
WEATHER:	Overcast, 50s
Atlas INSPECTOR:	Eric Marchese
SURFACE ELEVATION:	unknown
DEPTH TO WATER:	~8.5'
Atlas Project Number:	9521488019
Phase Number:	3150

Sample Interval	Recovery/ Penetration (in/in)	Blow Counts (per 6")	Headspace (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)
	N/A			1–5		5 inches of asphalt Pre clear to 6 feet with vacuum; fine to coarse SAND; tan; no odor or staining
X			0.0	6–7		
	32/60	N/A	0.2	8–10		
X			764.0	11–12		fine to coarse SAND; black; strong odor and staining
	40/60		581.0	13–15		
X			32.0	16		fine to coarse SAND with some fine gravel; grey and black; mild odor; trace staining
				17		End of Boring
				18–35		

Well Construction

	(Depth Interval)
CEMENT SEAL:	N/A
NATURAL FILL	N/A
BENTONITE SEAL	N/A
FILTER SAND	N/A
SOLID PVC RISER	N/A
PVC SCREEN	N/A

COMMENTS:
sampled for VPH, EPH, PCB and total arsenic.
Submitted samples to Pace Analytical

GRANULAR SOILS COHESIVELESS DENSITY

0-4	Very Loose
5-9	Loose
10-29	Medium Dense
30-49	Dense
50+	Very Dense

PROPORTIONS USED

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

BORING/MONITORING WELL LOG

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801
Phone: (781) 932-9400 Fax: (781) 932-6211

SITE:	309 Lowell Street, Andover MA
DATE:	04/04/2023
CLIENT:	Global
DRILLING CO.:	Martin Geo-Environmental
DRILLING METHOD:	Direct Push Geoprobe
SAMPLER METHOD:	5-foot, 2-inch dia. core barrel polyvinyl tube
AUGER DIAMETER:	N/A

WELL/BORING NO.:	SB-5
WEATHER:	Overcast, 50s
Atlas INSPECTOR:	Eric Marchese
SURFACE ELEVATION:	unknown
DEPTH TO WATER:	~8'
Atlas Project Number:	9521488019
Phase Number:	3150

Sample Interval	Recovery/ Penetration (in/in)	Blow Counts (per 6")	Headspace (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)
	N/A			1		5 inches of asphalt
				2		Pre clear to 6 feet with vacuum; fine to coarse SAND with trace fine gravel; brown; no odor or staining
				3		
				4		
				5		
X			0.0	6		
	40/60	N/A	0.0	7		
				8		
				9		very coarse to medium SAND with some fine gravel; brown to grey; no odor or staining
				10		
X			0.1	11		
	50/60			12		fine to coarse SAND with some fine gravel; tan to dark brown
			0.0	13		
				14		
				15		
X			0.0	16		
				17		End of Boring
				18		
				19		
				20		
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		

Well Construction

	(Depth Interval)
CEMENT SEAL:	N/A
NATURAL FILL	N/A
BENTONITE SEAL	N/A
FILTER SAND	N/A
SOLID PVC RISER	N/A
PVC SCREEN	N/A

COMMENTS:
sampled for VPH, EPH, PCB and total arsenic.
Submitted samples to Pace Analytical

GRANULAR SOILS COHESIVELESS DENSITY
0-4 Very Loose
5-9 Loose
10-29 Medium Dense
30-49 Dense
50+ Very Dense

PROPORTIONS USED
Trace 0-10%
Little 10-20%
Some 20-35%
And 35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

BORING/MONITORING WELL LOG

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801
Phone: (781) 932-9400 Fax: (781) 932-6211

SITE:	309 Lowell Street, Andover MA	**WELL/BORING NO.:**	SB-6
DATE:	04/04/2023	**WEATHER:**	Overcast, 50s
CLIENT:	Global	**Atlas INSPECTOR:**	Eric Marchese
DRILLING CO.:	Martin Geo-Environmental	**SURFACE ELEVATION:**	unknown
DRILLING METHOD:	Direct Push Geoprobe	**DEPTH TO WATER:**	~8'
SAMPLER METHOD:	5-foot, 2-inch dia. core barrel polyvinyl tube	**Atlas Project Number:**	9521488019
AUGER DIAMETER:	N/A	**Phase Number:**	3150

Sample Interval	Recovery/ Penetration (in/in)	Blow Counts (per 6")	Headspace (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)
	N/A			1–5		5 inches of asphalt Pre clear to 6 feet with vacuum; medium to coarse SAND with trace fine gravel; brown; no odor or staining
X			0.4	6–7		
	40/60	N/A	0.0	8–10		medium to coarse SAND with trace fine gravel'; light brown; no odor or staining
X			0.1	11–12		
	50/60		0.0	13–15		
X			0.1	16		End of Boring

Well Construction

	(Depth Interval)
CEMENT SEAL:	N/A
NATURAL FILL	N/A
BENTONITE SEAL	N/A
FILTER SAND	N/A
SOLID PVC RISER	N/A
PVC SCREEN	N/A

COMMENTS:
sampled for VPH, EPH, PCB and total arsenic.
Submitted samples to Pace Analytical

GRANULAR SOILS COHESIVELESS DENSITY

0-4	Very Loose
5-9	Loose
10-29	Medium Dense
30-49	Dense
50+	Very Dense

PROPORTIONS USED

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

APPENDIX G
RECORDS OF CLIMATOLOGICAL OBSERVATIONS

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	01	01	34	24		0.00		0.0		0.0								
2002	01	02	38	23		0.00		0.0		0.0								
2002	01	03	39	28		0.00		0.0		0.0								
2002	01	04	34	24		0.00		0.0		0.0								
2002	01	05	40	31		0.00		0.0		0.0								
2002	01	06	47	32		0.35		0.0		0.0								
2002	01	07	41	29		0.35		0.6		0.0								
2002	01	08	34	22		0.05		0.5		1.0								
2002	01	09	40	29		T		0.0		0.0								
2002	01	10	50	38		0.00		0.0		0.0								
2002	01	11	45	38		0.14		0.0		0.0								
2002	01	12	42	34		T		T		0.0								
2002	01	13	40	33		0.80		0.5		0.0								
2002	01	14	38	31		0.00		0.0		0.0								
2002	01	15	39	32		0.25		T		0.0								
2002	01	16	39	34		0.00		0.0		0.0								
2002	01	17	45	27		0.10		1.0		0.0								
2002	01	18	35	29		T		T		0.0								
2002	01	19	30	25		0.30		3.0		0.0								
2002	01	20	37	22		0.15		1.5		4.0								
2002	01	21	37	25		0.19		T		3.0								
2002	01	22	44	32		0.00		0.0		1.0								
2002	01	23	52	31		T		0.0		T								
2002	01	24	49	41		0.06		0.0		0.0								
2002	01	25	44	35		0.00		0.0		0.0								
2002	01	26	50	36		0.00		0.0		0.0								
2002	01	27	55	34		0.00		0.0		0.0								
2002	01	28	52	36		0.00		0.0		0.0								
2002	01	29	65	40		0.00		0.0		0.0								
2002	01	30	46	34		0.14		0.0		0.0								
2002	01	31	34	31		0.26		0.8		0.0								
		Summary	42	31		3.14		7.9										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	02	01	39	31		0.33		T		T								
2002	02	02	38	24		0.00		0.0		T								
2002	02	03	37	20		0.00		0.0		0.0								
2002	02	04	39	27		0.00		0.0		0.0								
2002	02	05	29	19		0.00		0.0		0.0								
2002	02	06	39	23		0.00		0.0		0.0								
2002	02	07	44	28		0.00		0.0		0.0								
2002	02	08	47	34		0.00		0.0		0.0								
2002	02	09	37	27		0.00		0.0		0.0								
2002	02	10	53	25		0.09		0.0		0.0								
2002	02	11	53	14		0.46		0.2		0.0								
2002	02	12	41	13		0.00		0.0		T								
2002	02	13	39	21		T		T		0.0								
2002	02	14	36	18		0.00		0.0		0.0								
2002	02	15	48	31		0.00		0.0		0.0								
2002	02	16	55	38		0.00		0.0		0.0								
2002	02	17	42	34		0.06		T		0.0								
2002	02	18	42	30		T		T		0.0								
2002	02	19	51	28		0.00		0.0		0.0								
2002	02	20	50	34		0.00		0.0		0.0								
2002	02	21	56	43		0.32		0.0		0.0								
2002	02	22	50	38		0.01		0.0		0.0								
2002	02	23	44	32		0.00		0.0		0.0								
2002	02	24	38	29		0.00		0.0		0.0								
2002	02	25	49	30		0.00		0.0		0.0								
2002	02	26	60	38		T		0.0		0.0								
2002	02	27	57	30		0.54		0.3		0.0								
2002	02	28	36	26		0.00		0.0		0.0								
		Summary	45	28		1.81		0.5										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	03	01	44	26		0.00		0.0		0.0								
2002	03	02	46	29		0.01		0.0		0.0								
2002	03	03	60	39		0.54		0.0		0.0								
2002	03	04	45	25		0.00		0.0		0.0								
2002	03	05	32	22		0.00		0.0		0.0								
2002	03	06	51	27		T		T		0.0								
2002	03	07	49	33		0.00		0.0		0.0								
2002	03	08	42	35		0.00		0.0		0.0								
2002	03	09	66	40		0.01		0.0		0.0								
2002	03	10	61	29		0.30		T		0.0								
2002	03	11	40	27		T		0.0		0.0								
2002	03	12	46	32		T		0.0		0.0								
2002	03	13	47	33		0.09		0.0		0.0								
2002	03	14	62	41		0.00		0.0		0.0								
2002	03	15	49	39		T		0.0		0.0								
2002	03	16	47	30		0.61		0.0		0.0								
2002	03	17	38	26		0.00		0.0		0.0								
2002	03	18	37	32		0.17		0.7		T								
2002	03	19	38	34		0.07		T		0.0								
2002	03	20	40	33		0.53		0.4		0.0								
2002	03	21	48	34		T		0.0		0.0								
2002	03	22	37	19		T		T		0.0								
2002	03	23	42	24		0.00		0.0		0.0								
2002	03	24	49	36		0.00		0.0		0.0								
2002	03	25	42	31		T		0.3		T								
2002	03	26	43	37		0.50		T		0.0								
2002	03	27	49	39		0.38		0.0		0.0								
2002	03	28	54	36		0.00		0.0		0.0								
2002	03	29	58	36		0.00		0.0		0.0								
2002	03	30	63	43		0.15		0.0		0.0								
2002	03	31	57	44		0.16		0.0		0.0								
		Summary	48	33		3.52		1.4										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	04	01	57	43		0.93		0.0		0.0								
2002	04	02	59	39		0.00		0.0		0.0								
2002	04	03	68	40		0.16		0.0		0.0								
2002	04	04	48	37		0.00		0.0		0.0								
2002	04	05	43	32		0.03		0.3		0.0								
2002	04	06	46	31		0.00		0.0		T								
2002	04	07	46	28		0.00		0.0		0.0								
2002	04	08	56	39		T		0.0		0.0								
2002	04	09	72	48		T		0.0		0.0								
2002	04	10	65	48		0.10		0.0		0.0								
2002	04	11	50	41		0.00		0.0		0.0								
2002	04	12	65	39		0.00		0.0		0.0								
2002	04	13	75	55		T		0.0		0.0								
2002	04	14	74	50		0.01		0.0		0.0								
2002	04	15	58	45		0.09		0.0		0.0								
2002	04	16	73	45		0.00		0.0		0.0								
2002	04	17	93	52		0.00		0.0		0.0								
2002	04	18	56	45		T		0.0		0.0								
2002	04	19	77	45		0.01		0.0		0.0								
2002	04	20	69	50		0.01		0.0		0.0								
2002	04	21	56	43		0.00		0.0		0.0								
2002	04	22	44	38		0.09		T		0.0								
2002	04	23	47	34		T		T		0.0								
2002	04	24	51	36		0.00		0.0		0.0								
2002	04	25	59	35		0.74		T		0.0								
2002	04	26	50	35		0.00		0.0		0.0								
2002	04	27	60	37		0.00		0.0		0.0								
2002	04	28	48	40		0.36		0.0		0.0								
2002	04	29	42	36		0.08		0.0		0.0								
2002	04	30	52	37		T		0.0		0.0								
		Summary	59	41		2.61		0.3										

Empty, or blank, cells indicate that a data observation was not reported.

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

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Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	05	01	60	43		0.00		0.0		0.0								
2002	05	02	50	44		0.52		0.0		0.0								
2002	05	03	56	45		0.07		0.0		0.0								
2002	05	04	68	46		0.00		0.0		0.0								
2002	05	05	68	47		0.00		0.0		0.0								
2002	05	06	77	50		0.00		0.0		0.0								
2002	05	07	76	54		0.00		0.0		0.0								
2002	05	08	67	51		0.00		0.0		0.0								
2002	05	09	56	49		0.05		0.0		0.0								
2002	05	10	76	55		0.29		0.0		0.0								
2002	05	11	67	48		0.00		0.0		0.0								
2002	05	12	57	47		0.37		0.0		0.0								
2002	05	13	49	44		1.56		0.0		0.0								
2002	05	14	62	44		0.30		0.0		0.0								
2002	05	15	60	43		T		0.0		0.0								
2002	05	16	78	49		0.00		0.0		0.0								
2002	05	17	72	52		T		0.0		0.0								
2002	05	18	52	37		1.09		0.0		0.0								
2002	05	19	59	40		0.00		0.0		0.0								
2002	05	20	57	42		0.00		0.0		0.0								
2002	05	21	62	43		T		0.0		0.0								
2002	05	22	68	47		0.00		0.0		0.0								
2002	05	23	77	49		0.00		0.0		0.0								
2002	05	24	84	51		T		0.0		0.0								
2002	05	25	66	50		0.00		0.0		0.0								
2002	05	26	70	49		T		0.0		0.0								
2002	05	27	70	58		T		0.0		0.0								
2002	05	28	72	55		T		0.0		0.0								
2002	05	29	68	54		T		0.0		0.0								
2002	05	30	82	59		0.00		0.0		0.0								
2002	05	31	82	64		0.23		0.0		0.0								
		Summary	67	49		4.48		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	06	01	86	65		0.00		0.0		0.0								
2002	06	02	76	58		0.05		0.0		0.0								
2002	06	03	72	53		0.00		0.0		0.0								
2002	06	04	68	51		T		0.0		0.0								
2002	06	05	74	59		0.23		0.0		0.0								
2002	06	06	71	54		0.79		0.0		0.0								
2002	06	07	58	48		0.63		0.0		0.0								
2002	06	08	63	47		0.00		0.0		0.0								
2002	06	09	81	53		T		0.0		0.0								
2002	06	10	75	61		0.00		0.0		0.0								
2002	06	11	89	55		0.24		0.0		0.0								
2002	06	12	56	51		0.16		0.0		0.0								
2002	06	13	62	51		T		0.0		0.0								
2002	06	14	61	54		0.04		0.0		0.0								
2002	06	15	56	50		0.74		0.0		0.0								
2002	06	16	58	50		0.22		0.0		0.0								
2002	06	17	77	54		0.20		0.0		0.0								
2002	06	18	77	59		0.00		0.0		0.0								
2002	06	19	69	59		0.02		0.0		0.0								
2002	06	20	73	57		0.00		0.0		0.0								
2002	06	21	85	60		0.00		0.0		0.0								
2002	06	22	83	63		0.05		0.0		0.0								
2002	06	23	82	60		0.07		0.0		0.0								
2002	06	24	86	69		T		0.0		0.0								
2002	06	25	84	63		0.00		0.0		0.0								
2002	06	26	93	68		0.00		0.0		0.0								
2002	06	27	91	70		1.32		T		0.0								
2002	06	28	84	70		0.01		0.0		0.0								
2002	06	29	76	63		0.00		0.0		0.0								
2002	06	30	84	64		0.00		0.0		0.0								
		Summary	75	58		4.77		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	07	01	91	67		0.00		0.0		0.0								
2002	07	02	94	76		0.00		0.0		0.0								
2002	07	03	93	80		0.00		0.0		0.0								
2002	07	04	97	77		0.00		0.0		0.0								
2002	07	05	84	69		0.00		0.0		0.0								
2002	07	06	83	65		T		0.0		0.0								
2002	07	07	78	68		T		0.0		0.0								
2002	07	08	91	65		0.00		0.0		0.0								
2002	07	09	91	68		0.61		0.0		0.0								
2002	07	10	78	63		0.01		0.0		0.0								
2002	07	11	75	58		0.00		0.0		0.0								
2002	07	12	75	61		0.00		0.0		0.0								
2002	07	13	87	64		0.00		0.0		0.0								
2002	07	14	86	67		0.00		0.0		0.0								
2002	07	15	88	67		0.05		0.0		0.0								
2002	07	16	80	65		0.00		0.0		0.0								
2002	07	17	79	60		0.00		0.0		0.0								
2002	07	18	91	69		T		0.0		0.0								
2002	07	19	76	64		0.20		0.0		0.0								
2002	07	20	71	63		0.00		0.0		0.0								
2002	07	21	86	62		0.00		0.0		0.0								
2002	07	22	90	66		0.00		0.0		0.0								
2002	07	23	97	72		0.46		0.0		0.0								
2002	07	24	72	61		T		0.0		0.0								
2002	07	25	72	58		0.00		0.0		0.0								
2002	07	26	70	58		0.00		0.0		0.0								
2002	07	27	73	62		0.07		0.0		0.0								
2002	07	28	77	64		0.02		0.0		0.0								
2002	07	29	92	69		0.00		0.0		0.0								
2002	07	30	95	73		T		0.0		0.0								
2002	07	31	93	74		0.00		0.0		0.0								
		Summary	84	66		1.42		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	08	01	87	72		0.00		0.0		0.0								
2002	08	02	86	69		0.11		0.0		0.0								
2002	08	03	87	69		0.00		0.0		0.0								
2002	08	04	93	72		0.00		0.0		0.0								
2002	08	05	93	75		0.00		0.0		0.0								
2002	08	06	79	65		0.00		0.0		0.0								
2002	08	07	82	63		0.00		0.0		0.0								
2002	08	08	77	64		0.00		0.0		0.0								
2002	08	09	78	64		0.00		0.0		0.0								
2002	08	10	88	67		0.00		0.0		0.0								
2002	08	11	90	69		0.00		0.0		0.0								
2002	08	12	90	70		0.00		0.0		0.0								
2002	08	13	97	73		0.00		0.0		0.0								
2002	08	14	101	76		0.00		0.0		0.0								
2002	08	15	94	74		0.00		0.0		0.0								
2002	08	16	94	77		0.02		0.0		0.0								
2002	08	17	96	78		0.00		0.0		0.0								
2002	08	18	95	72		T		0.0		0.0								
2002	08	19	84	70		0.00		0.0		0.0								
2002	08	20	76	66		0.34		0.0		0.0								
2002	08	21	76	65		0.00		0.0		0.0								
2002	08	22	86	65		0.47		0.0		0.0								
2002	08	23	70	60		0.02		0.0		0.0								
2002	08	24	68	58		0.27		0.0		0.0								
2002	08	25	79	58		0.01		0.0		0.0								
2002	08	26	85	65		0.00		0.0		0.0								
2002	08	27	77	66		0.00		0.0		0.0								
2002	08	28	69	63		0.00		0.0		0.0								
2002	08	29	65	61		0.84		0.0		0.0								
2002	08	30	70	60		0.05		0.0		0.0								
2002	08	31	66	59		0.00		0.0		0.0								
		Summary	83	67		2.13		0.0										

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Asheville, North Carolina 28801

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	09	01	68	54		0.01		0.0		0.0								
2002	09	02	67	62		0.51		0.0		0.0								
2002	09	03	73	66		0.39		0.0		0.0								
2002	09	04	82	65		0.35		0.0		0.0								
2002	09	05	76	62		0.00		0.0		0.0								
2002	09	06	80	58		0.00		0.0		0.0								
2002	09	07	79	62		0.00		0.0		0.0								
2002	09	08	89	64		0.00		0.0		0.0								
2002	09	09	90	68		0.00		0.0		0.0								
2002	09	10	91	71		0.00		0.0		0.0								
2002	09	11	80	59		T		0.0		0.0								
2002	09	12	72	54		0.00		0.0		0.0								
2002	09	13	82	56		0.00		0.0		0.0								
2002	09	14	81	63		0.00		0.0		0.0								
2002	09	15	81	70		0.25		0.0		0.0								
2002	09	16	79	61		0.20		0.0		0.0								
2002	09	17	68	59		0.00		0.0		0.0								
2002	09	18	70	60		0.00		0.0		0.0								
2002	09	19	79	59		0.00		0.0		0.0								
2002	09	20	79	60		0.00		0.0		0.0								
2002	09	21	83	65		0.00		0.0		0.0								
2002	09	22	84	68		0.18		0.0		0.0								
2002	09	23	76	65		0.91		0.0		0.0								
2002	09	24	65	58		0.00		0.0		0.0								
2002	09	25	65	56		0.00		0.0		0.0								
2002	09	26	64	57		0.15		0.0		0.0								
2002	09	27	74	57		0.30		0.0		0.0								
2002	09	28	75	55		0.14		0.0		0.0								
2002	09	29	61	50		0.00		0.0		0.0								
2002	09	30	70	54		0.00		0.0		0.0								
		Summary	76	61		3.39		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	10	01	80	60		0.00		0.0		0.0								
2002	10	02	85	65		T		0.0		0.0								
2002	10	03	75	54		0.01		0.0		0.0								
2002	10	04	65	53		0.01		0.0		0.0								
2002	10	05	82	59		0.04		0.0		0.0								
2002	10	06	61	52		0.00		0.0		0.0								
2002	10	07	71	52		0.00		0.0		0.0								
2002	10	08	59	48		0.00		0.0		0.0								
2002	10	09	57	45		0.00		0.0		0.0								
2002	10	10	59	51		0.00		0.0		0.0								
2002	10	11	60	52		0.10		0.0		0.0								
2002	10	12	58	56		0.23		0.0		0.0								
2002	10	13	59	57		0.36		0.0		0.0								
2002	10	14	57	41		0.00		0.0		0.0								
2002	10	15	51	37		0.00		0.0		0.0								
2002	10	16	63	50		0.71		0.0		0.0								
2002	10	17	63	47		0.00		0.0		0.0								
2002	10	18	57	45		0.00		0.0		0.0								
2002	10	19	61	43		T		0.0		0.0								
2002	10	20	58	43		0.00		0.0		0.0								
2002	10	21	54	38		0.00		0.0		0.0								
2002	10	22	52	35		0.00		0.0		0.0								
2002	10	23	47	34		0.27		T		0.0								
2002	10	24	49	34		0.00		0.0		0.0								
2002	10	25	49	35		0.00		0.0		0.0								
2002	10	26	53	46		1.74		0.0		0.0								
2002	10	27	58	44		0.00		0.0		0.0								
2002	10	28	52	38		T		0.0		0.0								
2002	10	29	46	34		0.00		0.0		0.0								
2002	10	30	43	35		0.00		0.0		0.0								
2002	10	31	47	32		0.00		0.0		0.0								
		Summary	59	46		3.47		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	11	01	53	36		0.01		0.0		0.0								
2002	11	02	40	28		T		0.0		0.0								
2002	11	03	42	28		0.00		0.0		0.0								
2002	11	04	48	31		0.06		0.0		0.0								
2002	11	05	47	38		0.00		0.0		0.0								
2002	11	06	50	42		0.88		0.0		0.0								
2002	11	07	43	31		T		0.0		0.0								
2002	11	08	59	31		0.00		0.0		0.0								
2002	11	09	60	46		0.00		0.0		0.0								
2002	11	10	70	53		T		0.0		0.0								
2002	11	11	69	61		0.07		0.0		0.0								
2002	11	12	61	48		0.69		0.0		0.0								
2002	11	13	48	45		0.58		0.0		0.0								
2002	11	14	51	40		0.00		0.0		0.0								
2002	11	15	61	46		0.00		0.0		0.0								
2002	11	16	49	37		0.47		T		0.0								
2002	11	17	46	35		1.25		0.0		0.0								
2002	11	18	42	35		0.19		0.0		0.0								
2002	11	19	43	32		0.00		0.0		0.0								
2002	11	20	55	35		0.00		0.0		0.0								
2002	11	21	50	35		T		0.0		0.0								
2002	11	22	48	43		0.56		0.0		0.0								
2002	11	23	46	35		T		T		0.0								
2002	11	24	50	34		0.00		0.0		0.0								
2002	11	25	48	37		0.04		0.0		0.0								
2002	11	26	46	37		0.01		0.0		0.0								
2002	11	27	37	22		0.21		3.5		2.0								
2002	11	28	30	19		0.00		0.0		4.0								
2002	11	29	36	26		0.01		0.1		3.0								
2002	11	30	46	36		0.00		0.0		1.0								
		Summary	49	37		5.03		3.6										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2002	12	01	40	26		0.00		0.0		0.0								
2002	12	02	38	25		T		T		0.0								
2002	12	03	32	16		0.05		0.8		1.0								
2002	12	04	31	16		0.00		0.0		T								
2002	12	05	28	24		0.16		3.4		T								
2002	12	06	32	25		0.07		1.5		4.0								
2002	12	07	38	20		0.00		0.0		3.0								
2002	12	08	41	27		0.00		0.0		2.0								
2002	12	09	27	12		0.00		0.0		T								
2002	12	10	38	21		0.00		0.0		T								
2002	12	11	43	27		0.22		0.0		T								
2002	12	12	42	36		0.52		T		0.0								
2002	12	13	43	32		0.03		0.0		0.0								
2002	12	14	47	36		1.99		0.0		0.0								
2002	12	15	45	36		T		0.0		0.0								
2002	12	16	38	28		0.12		T		0.0								
2002	12	17	30	21		0.00		0.0		0.0								
2002	12	18	41	22		0.00		0.0		0.0								
2002	12	19	46	26		0.00		0.0		0.0								
2002	12	20	61	39		1.11		0.0		0.0								
2002	12	21	46	35		T		0.0		0.0								
2002	12	22	50	34		0.00		0.0		0.0								
2002	12	23	43	36		0.00		0.0		0.0								
2002	12	24	39	31		0.00		0.0		0.0								
2002	12	25	40	28		0.79		3.3		0.0								
2002	12	26	35	27		0.21		2.1		5.0								
2002	12	27	35	23		0.00		0.0		3.0								
2002	12	28	35	26		0.00		0.0		3.0								
2002	12	29	40	30		T		T		2.0								
2002	12	30	32	25		T		T		2.0								
2002	12	31	40	29		0.03		T		2.0								
		Summary	39	27		5.30		11.1										

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151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	01	01	44	36		0.43		0.0		1.0								
2003	01	02	37	23		0.05		0.2		T								
2003	01	03	38	26		0.51		T		T								
2003	01	04	38	28		0.50		0.4		T								
2003	01	05	34	25		T		0.1		T								
2003	01	06	29	25		0.07		1.4		1.0								
2003	01	07	30	20		0.01		0.2		1.0								
2003	01	08	38	20		0.05		0.9		2.0								
2003	01	09	40	32		0.07		0.1		1.0								
2003	01	10	39	25		0.05		0.0		T								
2003	01	11	31	22		T		T		0.0								
2003	01	12	34	25		0.00		0.0		0.0								
2003	01	13	37	23		T		T		0.0								
2003	01	14	26	16		0.00		0.0		0.0								
2003	01	15	26	14		0.00		0.0		0.0								
2003	01	16	28	18		0.00		0.0		0.0								
2003	01	17	30	10		0.01		0.2		T								
2003	01	18	18	2		0.00		0.0		T								
2003	01	19	24	12		0.00		0.0		0.0								
2003	01	20	30	16		T		T		0.0								
2003	01	21	21	10		0.00		0.0		0.0								
2003	01	22	18	7		0.00		0.0		0.0								
2003	01	23	16	3		T		T		0.0								
2003	01	24	26	7		T		T		0.0								
2003	01	25	29	14		0.00		0.0		0.0								
2003	01	26	34	20		0.01		0.1		0.0								
2003	01	27	27	3		0.02		0.3		T								
2003	01	28	21	1		0.00		0.0		0.0								
2003	01	29	28	20		0.03		0.3		0.0								
2003	01	30	34	19		0.00		0.0		T								
2003	01	31	37	28		T		T		0.0								
		Summary	30	18		1.81		4.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	02	01	34	32		0.10		0.2		0.0								
2003	02	02	39	33		0.46		1.1		1.0								
2003	02	03	45	36		0.00		0.0		T								
2003	02	04	46	35		0.15		0.0		0.0								
2003	02	05	39	22		0.00		0.0		0.0								
2003	02	06	30	20		0.00		0.0		0.0								
2003	02	07	28	24		0.45		11.0		T								
2003	02	08	28	14		0.00		0.0		9.0								
2003	02	09	35	17		0.00		0.0		8.0								
2003	02	10	36	23		0.02		0.8		6.0								
2003	02	11	31	17		T		T		5.0								
2003	02	12	32	15		0.06		0.9		5.0								
2003	02	13	19	10		0.00		0.0		5.0								
2003	02	14	21	0		0.00		0.0		4.0								
2003	02	15	15	3		0.00		0.0		3.0								
2003	02	16	15	0		0.00		0.0		3.0								
2003	02	17	28	14		1.57		23.6		3.0								
2003	02	18	28	16		0.20		4.0		19.0								
2003	02	19	40	24		0.00		0.0		17.0								
2003	02	20	48	33		0.00		0.0		14.0								
2003	02	21	53	29		0.00		0.0		9.0								
2003	02	22	40	35		0.69		T		7.0								
2003	02	23	40	29		0.51		T		4.0								
2003	02	24	36	24		T		T		2.0								
2003	02	25	30	11		0.00		0.0		2.0								
2003	02	26	20	6		0.00		0.0		2.0								
2003	02	27	28	14		0.00		0.0		2.0								
2003	02	28	31	23		T		T		2.0								
		Summary	33	20		4.21		41.6										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	03	01	40	24		0.02		0.2		2.0								
2003	03	02	41	33		0.85		0.1		1.0								
2003	03	03	38	11		0.00		0.0		T								
2003	03	04	35	9		0.00		0.0		T								
2003	03	05	46	33		0.16		0.0		T								
2003	03	06	44	15		0.38		5.8		T								
2003	03	07	30	11		0.00		0.0		4.0								
2003	03	08	42	27		0.00		0.0		3.0								
2003	03	09	49	21		0.01		0.0		T								
2003	03	10	26	16		0.00		0.0		0.0								
2003	03	11	37	17		0.00		0.0		0.0								
2003	03	12	53	31		0.00		0.0		0.0								
2003	03	13	44	23		0.17		2.0		0.0								
2003	03	14	31	16		0.00		0.0		1.0								
2003	03	15	37	28		0.00		0.0		1.0								
2003	03	16	42	30		0.00		0.0		T								
2003	03	17	61	33		0.00		0.0		0.0								
2003	03	18	43	35		0.00		0.0		0.0								
2003	03	19	36	29		0.00		0.0		0.0								
2003	03	20	43	27		0.07		0.0		0.0								
2003	03	21	63	39		0.34		0.0		0.0								
2003	03	22	50	40		0.00		0.0		0.0								
2003	03	23	53	42		0.00		0.0		0.0								
2003	03	24	46	36		0.00		0.0		0.0								
2003	03	25	56	35		0.00		0.0		0.0								
2003	03	26	68	41		0.12		0.0		0.0								
2003	03	27	60	43		0.02		0.0		0.0								
2003	03	28	64	37		0.00		0.0		0.0								
2003	03	29	69	46		0.55		0.0		0.0								
2003	03	30	55	35		1.30		T		0.0								
2003	03	31	38	31		0.01		T		0.0								
		Summary	46	29		4.00		8.1										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	04	01	44	28		0.01		T										
2003	04	02	43	34		0.12		0.0		0.0								
2003	04	03	40	37		0.03		0.0										
2003	04	04	37	29		0.27		0.1		0.0								
2003	04	05	36	30		0.17		0.2		0.0								
2003	04	06	42	31		0.00		0.0		0.0								
2003	04	07	35	29		0.02		0.4		0.0								
2003	04	08	35	29		0.18		1.6		0.0								
2003	04	09	37	34		0.09		T		0.0								
2003	04	10	44	31		0.00		0.0		0.0								
2003	04	11	41	35		1.27		0.0										
2003	04	12	61	40		0.45		0.0		0.0								
2003	04	13	50	41		0.00		0.0		0.0								
2003	04	14	57	37		0.00		0.0										
2003	04	15	81	49		0.00		0.0		0.0								
2003	04	16	84	40		0.00		0.0		0.0								
2003	04	17	40	31		0.00		0.0										
2003	04	18	43	31		0.00		0.0										
2003	04	19	48	36		0.00		0.0		0.0								
2003	04	20	52	36		0.00		0.0										
2003	04	21	54	40		0.08		0.0										
2003	04	22	49	43		0.49		0.0		0.0								
2003	04	23	52	42		0.00		0.0		0.0								
2003	04	24	48	37		0.02		0.0										
2003	04	25	61	37		0.00		0.0										
2003	04	26	50	45		0.80		0.0										
2003	04	27	59	43		T		0.0										
2003	04	28	79	45		0.00		0.0										
2003	04	29	81	55		0.00		0.0										
2003	04	30	59	50		0.00		0.0										
		Summary	51	38		4.00		2.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	05	01	62	49		0.09		0.0		0.0								
2003	05	02	76	48		0.00		0.0		0.0								
2003	05	03	56	46		0.03		0.0		0.0								
2003	05	04	59	42		0.00		0.0		0.0								
2003	05	05	63	45		0.00		0.0		0.0								
2003	05	06	53	48		0.02		0.0		0.0								
2003	05	07	77	49		0.00		0.0		0.0								
2003	05	08	58	46		0.12		0.0		0.0								
2003	05	09	61	46		0.04		0.0		0.0								
2003	05	10	74	47		0.00		0.0		0.0								
2003	05	11	55	47		0.08		0.0		0.0								
2003	05	12	52	45		0.10		0.0		0.0								
2003	05	13	62	46		0.03		0.0		0.0								
2003	05	14	65	49		0.04		0.0		0.0								
2003	05	15	60	45		0.00		0.0		0.0								
2003	05	16	49	43		0.00		0.0		0.0								
2003	05	17	50	43		0.00		0.0		0.0								
2003	05	18	64	39		0.00		0.0		0.0								
2003	05	19	75	52		0.00		0.0		0.0								
2003	05	20	82	51		0.00		0.0		0.0								
2003	05	21	70	55		0.09		0.0		0.0								
2003	05	22	56	49		0.07		0.0		0.0								
2003	05	23	51	47		0.13		0.0		0.0								
2003	05	24	49	46		0.32		0.0		0.0								
2003	05	25	55	47		0.08		0.0		0.0								
2003	05	26	54	47		1.24		0.0		0.0								
2003	05	27	57	48		0.00		0.0		0.0								
2003	05	28	66	55		1.47		0.0		0.0								
2003	05	29	74	53		0.00		0.0		0.0								
2003	05	30	75	56		0.01		0.0		0.0								
2003	05	31	70	55		0.16		0.0		0.0								
		Summary	62	48		4.12		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	06	01	61	53		1.14		0.0		0.0								
2003	06	02	72	52		0.00		0.0		0.0								
2003	06	03	73	53		0.00		0.0		0.0								
2003	06	04	63	53		0.03		0.0		0.0								
2003	06	05	62	53		0.13		0.0		0.0								
2003	06	06	81	59		0.00		0.0		0.0								
2003	06	07	68	56		0.80		0.0		0.0								
2003	06	08	64	55		0.00		0.0		0.0								
2003	06	09	63	56		0.00		0.0		0.0								
2003	06	10	79	59		0.00		0.0		0.0								
2003	06	11	77	59		0.21		0.0		0.0								
2003	06	12	71	59		T		0.0		0.0								
2003	06	13	61	55		0.15		0.0		0.0								
2003	06	14	73	55		0.07		0.0		0.0								
2003	06	15	73	54		0.00		0.0		0.0								
2003	06	16	59	51		0.00		0.0		0.0								
2003	06	17	73	50		0.00		0.0		0.0								
2003	06	18	67	57		0.16		0.0		0.0								
2003	06	19	75	60		0.00		0.0		0.0								
2003	06	20	70	60		0.00		0.0		0.0								
2003	06	21	66	58		0.21		0.0		0.0								
2003	06	22	60	57		1.76		0.0		0.0								
2003	06	23	67	57		0.03		0.0		0.0								
2003	06	24	78	58		0.00		0.0		0.0								
2003	06	25	89	64		0.00		0.0		0.0								
2003	06	26	86	73		0.00		0.0		0.0								
2003	06	27	93	73		T		0.0		0.0								
2003	06	28	80	69		0.00		0.0		0.0								
2003	06	29	82	65		0.00		0.0		0.0								
2003	06	30	87	66		0.00		0.0		0.0								
		Summary	72	58		4.69		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	07	01	83	64		0.00		0.0										
2003	07	02	80	65		0.00		0.0										
2003	07	03	81	65		T		0.0										
2003	07	04	89	68		0.00		0.0										
2003	07	05	93	75		0.00		0.0										
2003	07	06	93	78		0.00		0.0										
2003	07	07	81	68		0.00		0.0										
2003	07	08	91	69		0.00		0.0										
2003	07	09	81	65		0.10		0.0										
2003	07	10	72	59		0.00		0.0										
2003	07	11	66	59		0.21		0.0										
2003	07	12	85	59		T		0.0										
2003	07	13	85	65		0.00		0.0										
2003	07	14	78	64		0.00		0.0										
2003	07	15	76	63		0.00		0.0										
2003	07	16	78	62		0.02		0.0										
2003	07	17	82	66		0.00		0.0										
2003	07	18	81	66		0.17		0.0										
2003	07	19	76	65		0.43		0.0										
2003	07	20	84	65		0.00		0.0										
2003	07	21	84	66		0.00		0.0										
2003	07	22	85	72		0.32		0.0										
2003	07	23	82	70		0.63		0.0										
2003	07	24	82	69		0.23		0.0										
2003	07	25	86	70		0.00		0.0										
2003	07	26	88	67		0.00		0.0										
2003	07	27	89	73		T		0.0										
2003	07	28	84	70		0.00		0.0										
2003	07	29	77	65		0.00		0.0										
2003	07	30	82	65		0.00		0.0										
2003	07	31	73	62		0.00		0.0										
		Summary	82	66		2.11		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	08	01	67	61		0.85		0.0		0.0								
2003	08	02	70	60		0.05		0.0		0.0								
2003	08	03	80	64		0.16		0.0		0.0								
2003	08	04	81	67		0.24		0.0		0.0								
2003	08	05	84	70		0.01		0.0		0.0								
2003	08	06	86	71		0.00		0.0		0.0								
2003	08	07	79	67		0.35		0.0		0.0								
2003	08	08	79	68		0.89		0.0		0.0								
2003	08	09	83	69		0.01		0.0		0.0								
2003	08	10	86	71		0.21		0.0		0.0								
2003	08	11	88	73		T		0.0		0.0								
2003	08	12	80	67		0.04		0.0		0.0								
2003	08	13	87	66		0.05		0.0		0.0								
2003	08	14	89	74		0.00		0.0		0.0								
2003	08	15	88	69		0.00		0.0		0.0								
2003	08	16	89	72		T		0.0		0.0								
2003	08	17	75	67		0.03		0.0		0.0								
2003	08	18	74	65		T		0.0		0.0								
2003	08	19	87	66		0.00		0.0		0.0								
2003	08	20	89	69		0.00		0.0		0.0								
2003	08	21	90	73		0.00		0.0		0.0								
2003	08	22	93	73		T		0.0		0.0								
2003	08	23	84	65				0.0		0.0								
2003	08	24	76	60				0.0		0.0								
2003	08	25	82	64		0.00		0.0		0.0								
2003	08	26	76	67		T		0.0		0.0								
2003	08	27	87	70		0.00		0.0		0.0								
2003	08	28	76	61		0.00		0.0		0.0								
2003	08	29	82	59		0.00		0.0		0.0								
2003	08	30	84	62		T		0.0		0.0								
2003	08	31	67	55		0.00		0.0		0.0								
		Summary	82	67		2.89		0.0										

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Asheville, North Carolina 28801

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	09	01	70	59		T		0.0										
2003	09	02	66	57		0.40		0.0										
2003	09	03	68	59		T		0.0										
2003	09	04	74	62		0.41		0.0										
2003	09	05	74	63		0.00		0.0										
2003	09	06	71	58		0.00		0.0										
2003	09	07	81	59		0.00		0.0										
2003	09	08	70	58		T		0.0										
2003	09	09	65	53		0.00		0.0										
2003	09	10	71	49		0.00		0.0										
2003	09	11	73	60		0.00		0.0										
2003	09	12	67	58		0.00		0.0										
2003	09	13	70	58		0.00		0.0										
2003	09	14	76	64		T		0.0										
2003	09	15	73	63		0.00		0.0										
2003	09	16	80	63		0.53		0.0										
2003	09	17	72	59		0.00		0.0										
2003	09	18	70	58		0.00		0.0										
2003	09	19	73	64		0.20		0.0										
2003	09	20	83	68		0.00		0.0										
2003	09	21	72	61		0.00		0.0										
2003	09	22	70	59		0.00		0.0										
2003	09	23	75	61		1.05		0.0										
2003	09	24	74	58		0.00		0.0										
2003	09	25	77	58		0.00		0.0										
2003	09	26	67	61		0.00		0.0										
2003	09	27	71	62		T		0.0										
2003	09	28	69	63		0.06		0.0										
2003	09	29	72	56		0.00		0.0										
2003	09	30	67	52		0.00		0.0										
Summary			72	59		2.65		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	10	01	63	47		T		0.0		0.0								
2003	10	02	64	45		0.08		0.0		0.0								
2003	10	03	59	41		0.00		0.0		0.0								
2003	10	04	62	45		0.11		0.0		0.0								
2003	10	05	60	47		0.00		0.0		0.0								
2003	10	06	60	42		0.00		0.0		0.0								
2003	10	07	62	41		0.00		0.0		0.0								
2003	10	08	74	50		0.00		0.0		0.0								
2003	10	09	71	53		0.00		0.0		0.0								
2003	10	10	62	53		0.00		0.0		0.0								
2003	10	11	59	51		0.00		0.0		0.0								
2003	10	12	59	50		2.00		0.0		0.0								
2003	10	13	70	55		0.00		0.0		0.0								
2003	10	14	61	47		0.00		0.0		0.0								
2003	10	15	64	52		1.40		0.0		0.0								
2003	10	16	62	46		0.00		0.0		0.0								
2003	10	17	58	47		0.01		0.0		0.0								
2003	10	18	55	44		0.05		0.0		0.0								
2003	10	19	45	40		T		0.0		0.0								
2003	10	20	54	36		0.00		0.0		0.0								
2003	10	21	70	46		0.02		0.0		0.0								
2003	10	22	53	39		0.01		0.0		0.0								
2003	10	23	41	36		0.01		T		0.0								
2003	10	24	48	34		0.00		0.0		0.0								
2003	10	25	56	33		0.00		0.0		0.0								
2003	10	26	63	49		T		0.0		0.0								
2003	10	27	66	56		1.00		0.0		0.0								
2003	10	28	57	50		0.02		0.0		0.0								
2003	10	29	70	51		1.49		0.0		0.0								
2003	10	30	58	46		0.00		0.0		0.0								
2003	10	31	65	43		0.00		0.0		0.0								
		Summary	60	46		6.20		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	11	01	76	54		0.00		0.0		0.0								
2003	11	02	64	52		0.03		0.0		0.0								
2003	11	03	65	52		0.30		0.0		0.0								
2003	11	04	52	44		0.01		0.0		0.0								
2003	11	05	54	41		0.69		0.0		0.0								
2003	11	06	58	50		T		0.0		0.0								
2003	11	07	55	48		T		0.0		0.0								
2003	11	08	49	28		0.00		0.0		0.0								
2003	11	09	40	27		0.00		0.0		0.0								
2003	11	10	48	28		0.00		0.0		0.0								
2003	11	11	50	32		0.14		0.0		0.0								
2003	11	12	52	47		T		0.0		0.0								
2003	11	13	59	40		0.17		0.0		0.0								
2003	11	14	40	33		0.00		0.0		0.0								
2003	11	15	44	32		0.00		0.0		0.0								
2003	11	16	47	31		0.00		0.0		0.0								
2003	11	17	45	37		0.03		0.0		0.0								
2003	11	18	49	35		0.00		0.0		0.0								
2003	11	19	58	43		T		0.0		0.0								
2003	11	20	60	43		0.49		0.0		0.0								
2003	11	21	50	43		0.07		0.0		0.0								
2003	11	22	51	40		0.00		0.0		0.0								
2003	11	23	49	36		0.00		0.0		0.0								
2003	11	24	49	35		0.00		0.0		0.0								
2003	11	25	48	35		0.15		0.0		0.0								
2003	11	26	46	32		0.00		0.0		0.0								
2003	11	27	47	39		0.00		0.0		0.0								
2003	11	28	63	43		0.43		0.0		0.0								
2003	11	29	62	38		0.12		0.0		0.0								
2003	11	30	47	38		0.00		0.0		0.0								
		Summary	53	39		2.63		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2003	12	01	50	34		0.00		0.0										
2003	12	02	34	17		0.01		0.2		T								
2003	12	03	30	16		0.00		0.0										
2003	12	04	35	22		0.00		0.0		0.0								
2003	12	05	33	19		0.07		0.7		0.0								
2003	12	06	34	22		1.49		11.9		4.0								
2003	12	07	30	25		0.54		4.3		17.0								
2003	12	08	36	26		0.00		0.0		17.0								
2003	12	09	34	23		0.00		0.0		15.0								
2003	12	10	40	31		0.00		0.0		14.0								
2003	12	11	50	39		0.69		0.0		12.0								
2003	12	12	42	32		0.00		0.0		5.0								
2003	12	13	32	19		0.00		0.0		2.0								
2003	12	14	38	17		0.66		4.4		2.0								
2003	12	15	41	30		0.83		T		3.0								
2003	12	16	42	28		0.00		0.0		3.0								
2003	12	17	54	32		0.35		0.0		1.0								
2003	12	18	43	32		T		0.0		T								
2003	12	19	41	30		0.00		0.0		T								
2003	12	20	38	28		0.00		0.0		0.0								
2003	12	21	36	22		0.00		0.0		0.0								
2003	12	22	50	34		0.00		0.0		0.0								
2003	12	23	54	38		0.00		0.0		0.0								
2003	12	24	58	44		0.36		0.0		0.0								
2003	12	25	54	36		0.06		0.0		0.0								
2003	12	26	40	33		T		T		0.0								
2003	12	27	48	33		0.00		0.0		0.0								
2003	12	28	53	30		0.00		0.0		0.0								
2003	12	29	58	36		0.00		0.0		0.0								
2003	12	30	55	39		T		0.0		0.0								
2003	12	31	46	38		0.00		0.0		0.0								
		Summary	43	29		5.06		21.5										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	01	01	44	34		0.00		0.0		0.0								
2004	01	02	39	27		0.06		0.3		0.0								
2004	01	03	47	35		0.16		0.0		0.0								
2004	01	04	50	34		0.17		T		T								
2004	01	05	37	32		0.29		T		0.0								
2004	01	06	35	21		0.01		0.2		T								
2004	01	07	23	17		T		T		0.0								
2004	01	08	21	9		0.00		0.0		0.0								
2004	01	09	9	1		0.00		0.0		0.0								
2004	01	10	14	-3		0.00		0.0		0.0								
2004	01	11	24	3		0.00		0.0		0.0								
2004	01	12	33	23		0.09		1.1		1.0								
2004	01	13	40	8		T		T		1.0								
2004	01	14	8	-4		T		T		T								
2004	01	15	8	-5		0.01		0.2		T								
2004	01	16	14	-7		T		T		T								
2004	01	17	38	13		0.00		0.0		T								
2004	01	18	34	28		0.15		1.6		T								
2004	01	19	28	17		0.00		0.0		T								
2004	01	20	25	15		0.00		0.0		T								
2004	01	21	29	15		0.00		0.0		0.0								
2004	01	22	36	18		T		T		0.0								
2004	01	23	22	11		0.00		0.0		0.0								
2004	01	24	19	6		T		T		0.0								
2004	01	25	16	1		0.00		0.0		0.0								
2004	01	26	19	5		0.00		0.0		0.0								
2004	01	27	24	12		0.00		0.0		0.0								
2004	01	28	28	22		0.07		1.5		0.0								
2004	01	29	27	18		T		T		2.0								
2004	01	30	26	16		0.00		0.0		1.0								
2004	01	31	27	15		T		T		T								
		Summary	27	14		1.01		4.9										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	02	01	35	15		0.00		0.0		T								
2004	02	02	36	23		0.00		0.0		0.0								
2004	02	03	41	23		0.44		T		0.0								
2004	02	04	44	29		0.00		0.0		0.0								
2004	02	05	37	27		0.00		0.0		0.0								
2004	02	06	34	27		0.90		2.4		0.0								
2004	02	07	41	27		0.10		T		1.0								
2004	02	08	28	16		0.00		0.0		1.0								
2004	02	09	43	24		0.00		0.0		0.0								
2004	02	10	47	34		0.00		0.0		0.0								
2004	02	11	39	27		T		T		0.0								
2004	02	12	37	21		0.00		0.0		0.0								
2004	02	13	41	31		0.00		0.0		0.0								
2004	02	14	42	32		0.00		0.0		0.0								
2004	02	15	34	15		T		T		0.0								
2004	02	16	30	12		0.00		0.0		0.0								
2004	02	17	30	14		0.00		0.0		0.0								
2004	02	18	32	28		T		T		0.0								
2004	02	19	43	25		0.00		0.0		0.0								
2004	02	20	40	28		0.00		0.0		0.0								
2004	02	21	41	33		0.01		0.0		0.0								
2004	02	22	42	33		0.00		0.0		0.0								
2004	02	23	46	30		0.00		0.0		0.0								
2004	02	24	39	27		0.00		0.0		0.0								
2004	02	25	43	24		0.00		0.0		0.0								
2004	02	26	43	27		0.00		0.0		0.0								
2004	02	27	48	34		0.00		0.0		0.0								
2004	02	28	55	31		0.00		0.0		0.0								
2004	02	29	55	31		0.00		0.0		0.0								
		Summary	40	26		1.45		2.4										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	03	01	50	39		0.00		0.0		0.0								
2004	03	02	66	38		0.03		0.0		0.0								
2004	03	03	55	43		0.00		0.0		0.0								
2004	03	04	51	38		0.09		0.0		0.0								
2004	03	05	46	36		T		0.0		0.0								
2004	03	06	60	41		0.16		0.0		0.0								
2004	03	07	48	36		0.00		0.0		0.0								
2004	03	08	38	30		0.11		0.9		0.0								
2004	03	09	34	29		0.01		T		1.0								
2004	03	10	40	29		0.00		0.0		T								
2004	03	11	47	32		0.00		0.0		0.0								
2004	03	12	51	31		0.06		0.1		0.0								
2004	03	13	45	30		0.00		0.0		0.0								
2004	03	14	43	25		0.00		0.0		0.0								
2004	03	15	52	37		T		0.0		0.0								
2004	03	16	38	27		0.65		6.5		0.0								
2004	03	17	31	24		0.27		2.7		8.0								
2004	03	18	29	26		0.02		0.4		8.0								
2004	03	19	34	27		T		T		7.0								
2004	03	20	42	27		0.17		0.0		4.0								
2004	03	21	50	31		0.30		0.0		1.0								
2004	03	22	32	23		0.00		0.0		0.0								
2004	03	23	42	21		T		T		0.0								
2004	03	24	44	30		T		T		0.0								
2004	03	25	54	39		T		0.0		0.0								
2004	03	26	67	44		0.01		0.0		0.0								
2004	03	27	66	45		0.18		0.0		0.0								
2004	03	28	47	35		0.00		0.0		0.0								
2004	03	29	41	33		0.00		0.0		0.0								
2004	03	30	40	33		0.00		0.0		0.0								
2004	03	31	41	38		1.32		0.0		0.0								
		Summary	46	33		3.38		10.6										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	04	01	43	39		4.29		0.0		0.0								
2004	04	02	40	38		0.42		0.0		0.0								
2004	04	03	41	38		0.00		0.0		0.0								
2004	04	04	45	39		0.22		0.0		0.0								
2004	04	05	42	31		0.04		T		0.0								
2004	04	06	52	30		0.00		0.0		0.0								
2004	04	07	56	38		0.00		0.0		0.0								
2004	04	08	52	38		0.00		0.0		0.0								
2004	04	09	59	43		0.00		0.0		0.0								
2004	04	10	58	41		0.00		0.0		0.0								
2004	04	11	48	39		0.00		0.0		0.0								
2004	04	12	49	38		0.04		0.0		0.0								
2004	04	13	60	40		1.97		0.0		0.0								
2004	04	14	61	47		0.26		0.0		0.0								
2004	04	15	53	41		0.11		0.0		0.0								
2004	04	16	52	37		0.00		0.0		0.0								
2004	04	17	72	36		0.00		0.0		0.0								
2004	04	18	62	48		0.00		0.0		0.0								
2004	04	19	86	44		0.00		0.0		0.0								
2004	04	20	72	46		0.00		0.0		0.0								
2004	04	21	61	43		0.00		0.0		0.0								
2004	04	22	81	49		T		0.0		0.0								
2004	04	23	57	42		0.99		0.0		0.0								
2004	04	24	65	42		0.02		0.0		0.0								
2004	04	25	47	38		0.03		0.0		0.0								
2004	04	26	53	40		0.82		0.0		0.0								
2004	04	27	55	45		0.36		0.0		0.0								
2004	04	28	58	47		0.00		0.0		0.0								
2004	04	29	74	43		0.00		0.0		0.0								
2004	04	30	81	55		0.00		0.0		0.0								
		Summary	58	41		9.57		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	05	01	80	53		0.00		0.0		0.0								
2004	05	02	76	59		0.02		0.0		0.0								
2004	05	03	65	51		0.61		0.0		0.0								
2004	05	04	58	43		0.20		0.0		0.0								
2004	05	05	66	40		T		0.0		0.0								
2004	05	06	65	47		0.00		0.0		0.0								
2004	05	07	84	52		0.02		0.0		0.0								
2004	05	08	57	45		T		0.0		0.0								
2004	05	09	58	48		0.19		0.0		0.0								
2004	05	10	65	47		0.00		0.0		0.0								
2004	05	11	85	55		T		0.0		0.0								
2004	05	12	73	57		0.00		0.0		0.0								
2004	05	13	66	46		0.00		0.0		0.0								
2004	05	14	69	46		0.00		0.0		0.0								
2004	05	15	89	61		0.00		0.0		0.0								
2004	05	16	73	51		0.10		0.0		0.0								
2004	05	17	64	50		0.00		0.0		0.0								
2004	05	18	75	53		0.22		0.0		0.0								
2004	05	19	70	56		T		0.0		0.0								
2004	05	20	72	52		0.00		0.0		0.0								
2004	05	21	77	54		T		0.0		0.0								
2004	05	22	61	48		0.03		0.0		0.0								
2004	05	23	58	48		0.03		0.0		0.0								
2004	05	24	54	49		0.67		0.0		0.0								
2004	05	25	52	49		0.00		0.0		0.0								
2004	05	26	52	47		0.08		0.0		0.0								
2004	05	27	64	50		0.41		0.0		0.0								
2004	05	28	61	53		0.49		0.0		0.0								
2004	05	29	62	51		0.00		0.0		0.0								
2004	05	30	71	51		0.00		0.0		0.0								
2004	05	31	64	49		T		0.0		0.0								
		Summary	67	50		3.07		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	06	01	55	49		0.25		0.0		0.0								
2004	06	02	75	49		0.49		0.0		0.0								
2004	06	03	74	54		0.10		0.0		0.0								
2004	06	04	74	53		0.00		0.0		0.0								
2004	06	05	63	53		0.00		0.0		0.0								
2004	06	06	58	51		0.16		0.0		0.0								
2004	06	07	66	50		0.00		0.0		0.0								
2004	06	08	87	53		0.00		0.0		0.0								
2004	06	09	93	70		0.12		0.0		0.0								
2004	06	10	73	59		0.01		0.0		0.0								
2004	06	11	70	55		0.00		0.0		0.0								
2004	06	12	65	54		0.00		0.0		0.0								
2004	06	13	77	54		0.00		0.0		0.0								
2004	06	14	73	58		T		0.0		0.0								
2004	06	15	89	65		0.00		0.0		0.0								
2004	06	16	81	69		0.00		0.0		0.0								
2004	06	17	82	62		0.01		0.0		0.0								
2004	06	18	66	60		0.09		0.0		0.0								
2004	06	19	82	58		T		0.0		0.0								
2004	06	20	74	56		0.00		0.0		0.0								
2004	06	21	78	59		0.00		0.0		0.0								
2004	06	22	76	61		T		0.0		0.0								
2004	06	23	84	64		0.00		0.0		0.0								
2004	06	24	76	59		0.00		0.0		0.0								
2004	06	25	78	61		0.20		0.0		0.0								
2004	06	26	71	62		0.48		0.0		0.0								
2004	06	27	78	58		0.00		0.0		0.0								
2004	06	28	78	63		0.00		0.0		0.0								
2004	06	29	68	59		0.04		0.0		0.0								
2004	06	30	84	63		0.00		0.0		0.0								
		Summary	75	58		1.95		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	07	01	85	63		0.11		0.0		0.0								
2004	07	02	84	63		0.70		T		0.0								
2004	07	03	76	65		0.00		0.0		0.0								
2004	07	04	72	63		0.00		0.0		0.0								
2004	07	05	73	65		0.88		0.0		0.0								
2004	07	06	80	66		0.00		0.0		0.0								
2004	07	07	74	65		0.00		0.0		0.0								
2004	07	08	73	64		0.06		0.0		0.0								
2004	07	09	79	61		T		0.0		0.0								
2004	07	10	83	64		0.00		0.0		0.0								
2004	07	11	73	63		0.00		0.0		0.0								
2004	07	12	78	63		0.00		0.0		0.0								
2004	07	13	67	62		0.17		0.0		0.0								
2004	07	14	67	62		0.44		0.0		0.0								
2004	07	15	79	60		0.00		0.0		0.0								
2004	07	16	81	64		0.00		0.0		0.0								
2004	07	17	85	69		0.00		0.0		0.0								
2004	07	18	77	66		T		0.0		0.0								
2004	07	19	71	65		0.04		0.0		0.0								
2004	07	20	87	67		0.00		0.0		0.0								
2004	07	21	81	69		0.00		0.0		0.0								
2004	07	22	87	69		0.00		0.0		0.0								
2004	07	23	85	69		0.00		0.0		0.0								
2004	07	24	75	62		1.20		0.0		0.0								
2004	07	25	72	61		T		0.0		0.0								
2004	07	26	72	61		0.00		0.0		0.0								
2004	07	27	70	63		0.06		0.0		0.0								
2004	07	28	66	59		0.21		0.0		0.0								
2004	07	29	79	64		0.00		0.0		0.0								
2004	07	30	86	68		0.00		0.0		0.0								
2004	07	31	89	72		0.00		0.0		0.0								
		Summary	78	64		3.87		0.0										

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Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	08	01	82	73		T		0.0		0.0								
2004	08	02	81	68		0.00		0.0		0.0								
2004	08	03	90	69		0.00		0.0		0.0								
2004	08	04	78	69		T		0.0		0.0								
2004	08	05	70	62		0.34		0.0		0.0								
2004	08	06	71	61		0.00		0.0		0.0								
2004	08	07	72	57		0.00		0.0		0.0								
2004	08	08	78	59		0.00		0.0		0.0								
2004	08	09	83	62		0.00		0.0		0.0								
2004	08	10	86	64		0.00		0.0		0.0								
2004	08	11	84	69		0.00		0.0		0.0								
2004	08	12	85	68		0.56		0.0		0.0								
2004	08	13	80	69		0.79		0.0		0.0								
2004	08	14	84	70		0.01		0.0		0.0								
2004	08	15	74	64		1.01		0.0		0.0								
2004	08	16	65	62		0.13		0.0		0.0								
2004	08	17	73	60		0.03		0.0		0.0								
2004	08	18	81	61		0.00		0.0		0.0								
2004	08	19	83	68		T		0.0		0.0								
2004	08	20	90	70		0.11		0.0		0.0								
2004	08	21	79	63		1.05		0.0		0.0								
2004	08	22	69	57		0.00		0.0		0.0								
2004	08	23	82	59		0.00		0.0		0.0								
2004	08	24	71	62		0.00		0.0		0.0								
2004	08	25	72	57		0.00		0.0		0.0								
2004	08	26	78	56		0.00		0.0		0.0								
2004	08	27	83	64		0.00		0.0		0.0								
2004	08	28	91	70		0.00		0.0		0.0								
2004	08	29	88	70		0.00		0.0		0.0								
2004	08	30	87	66		0.18		0.0		0.0								
2004	08	31	82	66		0.17		0.0		0.0								
		Summary	80	64		4.38		0.0										

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Asheville, North Carolina 28801

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	09	01	81	66		0.00		0.0		0.0								
2004	09	02	69	61		0.00		0.0		0.0								
2004	09	03	81	59		0.00		0.0		0.0								
2004	09	04	85	62		0.00		0.0		0.0								
2004	09	05	66	56		0.00		0.0		0.0								
2004	09	06	67	55		0.00		0.0		0.0								
2004	09	07	80	58		T		0.0		0.0								
2004	09	08	72	66		1.65		0.0		0.0								
2004	09	09	83	65		0.22		0.0		0.0								
2004	09	10	76	62		T		0.0		0.0								
2004	09	11	69	57		0.00		0.0		0.0								
2004	09	12	72	53		0.00		0.0		0.0								
2004	09	13	78	59		0.00		0.0		0.0								
2004	09	14	64	56		0.00		0.0		0.0								
2004	09	15	70	54		T		0.0		0.0								
2004	09	16	68	62		0.02		0.0		0.0								
2004	09	17	81	64		0.00		0.0		0.0								
2004	09	18	70	54		2.87		0.0		0.0								
2004	09	19	63	47		0.00		0.0		0.0								
2004	09	20	70	48		0.00		0.0		0.0								
2004	09	21	69	59		0.00		0.0		0.0								
2004	09	22	81	60		0.00		0.0		0.0								
2004	09	23	74	59		0.00		0.0		0.0								
2004	09	24	69	56		0.00		0.0		0.0								
2004	09	25	78	57		0.00		0.0		0.0								
2004	09	26	77	60		0.00		0.0		0.0								
2004	09	27	76	55		0.00		0.0		0.0								
2004	09	28	64	60		1.88		0.0		0.0								
2004	09	29	62	53		0.71		0.0		0.0								
2004	09	30	67	49		0.09		0.0		0.0								
		Summary	73	58		7.44		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	10	01	65	55		0.00		0.0		0.0								
2004	10	02	67	54		0.06		0.0		0.0								
2004	10	03	61	50		0.00		0.0		0.0								
2004	10	04	68	47		0.00		0.0		0.0								
2004	10	05	57	43		0.00		0.0		0.0								
2004	10	06	62	40		0.00		0.0		0.0								
2004	10	07	67	49		0.00		0.0		0.0								
2004	10	08	74	51		0.00		0.0		0.0								
2004	10	09	72	58		0.00		0.0		0.0								
2004	10	10	67	53		0.00		0.0		0.0								
2004	10	11	65	50		0.00		0.0		0.0								
2004	10	12	61	49		0.06		0.0		0.0								
2004	10	13	69	49		0.00		0.0		0.0								
2004	10	14	60	48		0.03		0.0		0.0								
2004	10	15	59	56		0.63		0.0		0.0								
2004	10	16	64	51		0.57		0.0		0.0								
2004	10	17	57	46		0.00		0.0		0.0								
2004	10	18	58	44		T		0.0		0.0								
2004	10	19	50	47		0.49		0.0		0.0								
2004	10	20	52	45		0.00		0.0		0.0								
2004	10	21	51	43		0.00		0.0		0.0								
2004	10	22	51	44		0.01		0.0		0.0								
2004	10	23	51	43		T		0.0		0.0								
2004	10	24	51	46		0.01		0.0		0.0								
2004	10	25	52	45		0.00		0.0		0.0								
2004	10	26	53	43		0.00		0.0		0.0								
2004	10	27	59	44		0.00		0.0		0.0								
2004	10	28	51	38		0.00		0.0		0.0								
2004	10	29	58	40		0.00		0.0		0.0								
2004	10	30	60	45		0.02		0.0		0.0								
2004	10	31	72	56		0.00		0.0		0.0								
		Summary	60	47		1.88		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	11	01	60	44		0.00		0.0		0.0								
2004	11	02	54	40		T		0.0		0.0								
2004	11	03	56	38		0.03		0.0		0.0								
2004	11	04	50	34		0.77		0.0		0.0								
2004	11	05	52	44		0.01		0.0		0.0								
2004	11	06	57	41		0.00		0.0		0.0								
2004	11	07	66	45		0.00		0.0		0.0								
2004	11	08	59	36		T		T		0.0								
2004	11	09	40	28		0.00		0.0		0.0								
2004	11	10	41	25		0.00		0.0		0.0								
2004	11	11	57	38		0.00		0.0		0.0								
2004	11	12	44	32		0.29		1.9		0.0								
2004	11	13	39	29		0.20		2.0		4.0								
2004	11	14	46	24		0.00		0.0		0.0								
2004	11	15	55	37		0.00		0.0		0.0								
2004	11	16	47	39		0.00		0.0		0.0								
2004	11	17	49	37		0.00		0.0		0.0								
2004	11	18	57	43		T		0.0		0.0								
2004	11	19	61	43		0.00		0.0		0.0								
2004	11	20	47	39		0.08		0.0		0.0								
2004	11	21	46	42		0.01		0.0		0.0								
2004	11	22	51	42		0.00		0.0		0.0								
2004	11	23	50	35		0.00		0.0		0.0								
2004	11	24	59	41		0.15		0.0		0.0								
2004	11	25	63	39		0.57		0.0		0.0								
2004	11	26	40	32		0.00		0.0		0.0								
2004	11	27	49	30		0.00		0.0		0.0								
2004	11	28	56	44		0.80		0.0		0.0								
2004	11	29	50	36		0.00		0.0		0.0								
2004	11	30	46	36		0.00		0.0		0.0								
		Summary	52	37		2.91		3.9										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

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National Oceanic & Atmospheric Administration
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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2004	12	01	58	42		0.51		0.0										
2004	12	02	47	38		0.00		0.0										
2004	12	03	47	35		0.00		0.0										
2004	12	04	39	31		0.00		0.0										
2004	12	05	50	29		0.00		0.0										
2004	12	06	38	24		0.01		T										
2004	12	07	47	37		0.99		0.0										
2004	12	08	52	36		0.02		0.0										
2004	12	09	43	37		0.00		0.0										
2004	12	10	45	41		0.48		0.0										
2004	12	11	46	40		0.09		0.0										
2004	12	12	46	36		T		0.0										
2004	12	13	47	37		0.01		0.0										
2004	12	14	37	21		T		T										
2004	12	15	28	18		0.00		0.0										
2004	12	16	42	20		0.00		0.0										
2004	12	17	42	26		T		T										
2004	12	18	37	21		0.00		0.0										
2004	12	19	42	31		0.00		0.0										
2004	12	20	39	6		0.11		0.6										
2004	12	21	33	6		0.00		0.0										
2004	12	22	47	25		0.00		0.0										
2004	12	23	61	39		0.93		0.0										
2004	12	24	53	28		T		0.0										
2004	12	25	33	22		0.00		0.0										
2004	12	26	34	22		0.36		4.3										
2004	12	27	25	13		0.15		2.3										
2004	12	28	28	11		0.00		0.0										
2004	12	29	41	28		0.00		0.0										
2004	12	30	39	29		0.00		0.0										
2004	12	31	47	27		T		0.0										
		Summary	42	28		3.66		7.2										

Empty, or blank, cells indicate that a data observation was not reported.

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	01	01	52	34		0.00		0.0										
2005	01	02	40	28		0.02		0.0										
2005	01	03	53	40		0.18		0.0										
2005	01	04	45	37		0.29		0.0										
2005	01	05	40	27		0.10		1.4										
2005	01	06	38	25		0.64		5.5										
2005	01	07	38	31		0.00		0.0										
2005	01	08	34	29		0.58		1.5										
2005	01	09	33	25		0.00		0.0										
2005	01	10	40	32		0.00		0.0										
2005	01	11	37	29		0.01		T										
2005	01	12	39	30		0.29		0.4										
2005	01	13	58	31		T		0.0										
2005	01	14	63	33		0.44		0.0										
2005	01	15	33	25		0.00		0.0										
2005	01	16	31	22		0.10		1.1										
2005	01	17	24	12		0.17		2.0										
2005	01	18	13	4		0.00		0.0										
2005	01	19	27	2		0.07		2.9										
2005	01	20	28	14		0.01		0.4										
2005	01	21	14	2		0.00		0.0										
2005	01	22	27	-2		0.50		9.1										
2005	01	23	27	4		0.75		13.4										
2005	01	24	23	3		0.00		0.0										
2005	01	25	26	18		0.00		0.0										
2005	01	26	29	15		0.30		5.4										
2005	01	27	16	5		T		0.2										
2005	01	28	21	2		0.00		0.0										
2005	01	29	35	9		0.00		0.0										
2005	01	30	36	25		0.00		0.0										
2005	01	31	28	19		0.00		0.0										
		Summary	34	20		4.45		43.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	02	01	32	15		0.00		0.0										
2005	02	02	35	16		0.00		0.0										
2005	02	03	36	22		0.23		T										
2005	02	04	36	31		0.04		T										
2005	02	05	47	31		0.00		0.0										
2005	02	06	40	32		0.00		0.0										
2005	02	07	42	29		0.00		0.0										
2005	02	08	48	32		0.00		0.0										
2005	02	09	50	37		0.01		0.0										
2005	02	10	39	33		0.86		0.8										
2005	02	11	34	26		0.03		0.3										
2005	02	12	38	27		0.00		0.0										
2005	02	13	37	24		T		T										
2005	02	14	38	21		0.03		T										
2005	02	15	50	37		0.32		0.0										
2005	02	16	54	34		0.19		0.0										
2005	02	17	40	31		0.00		0.0										
2005	02	18	34	20		T		T										
2005	02	19	28	13		0.00		0.0										
2005	02	20	31	21		0.00		0.0										
2005	02	21	34	24		0.37		5.5										
2005	02	22	33	24		0.05		0.6										
2005	02	23	37	23		T		T										
2005	02	24	25	16		0.22		5.5										
2005	02	25	29	19		0.10		2.5										
2005	02	26	33	19		0.00		0.0										
2005	02	27	33	20		0.00		0.0										
2005	02	28	34	19		0.25		2.5										
		Summary	37	25		2.70		17.7										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	03	01	32	26		0.60		6.1										
2005	03	02	34	25		T		T										
2005	03	03	30	20		0.00		0.0										
2005	03	04	34	19		0.00		0.0										
2005	03	05	41	25		0.00		0.0										
2005	03	06	41	27		T		T										
2005	03	07	46	35		0.00		0.0										
2005	03	08	45	16		0.49		4.5										
2005	03	09	24	11		T		0.3										
2005	03	10	30	15		0.00		0.0										
2005	03	11	34	21		0.02		0.3										
2005	03	12	37	31		0.80		2.8										
2005	03	13	39	27		T		T										
2005	03	14	41	27		0.00		0.0										
2005	03	15	46	31		0.00		0.0										
2005	03	16	45	32		0.00		0.0										
2005	03	17	46	30		0.00		0.0										
2005	03	18	45	30		0.00		0.0										
2005	03	19	48	31		0.00		0.0										
2005	03	20	52	33		0.00		0.0										
2005	03	21	42	34		0.00		0.0										
2005	03	22	55	34		0.00		0.0										
2005	03	23	44	33		0.04		T										
2005	03	24	42	33		0.15		0.5										
2005	03	25	50	32		0.00		0.0										
2005	03	26	39	27		0.00		0.0										
2005	03	27	51	29		0.00		0.0										
2005	03	28	43	35		1.30		0.0										
2005	03	29	51	40		0.49		0.0										
2005	03	30	48	39		0.00		0.0										
2005	03	31	44	37		0.00		0.0										
		Summary	42	29		3.89		14.5										

Empty, or blank, cells indicate that a data observation was not reported.

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	04	01	48	39		0.01		0.0										
2005	04	02	49	37		0.81		0.0										
2005	04	03	53	42		0.44		0.0										
2005	04	04	53	40		T		0.0										
2005	04	05	64	40		0.00		0.0										
2005	04	06	59	42		0.00		0.0										
2005	04	07	65	43		0.08		0.0										
2005	04	08	57	45		0.21		0.0										
2005	04	09	50	42		0.00		0.0										
2005	04	10	68	39		0.00		0.0										
2005	04	11	47	38		0.00		0.0										
2005	04	12	48	33		0.03		T										
2005	04	13	46	33		0.00		0.0										
2005	04	14	51	39		0.00		0.0										
2005	04	15	48	36		0.00		0.0										
2005	04	16	51	34		0.00		0.0										
2005	04	17	67	38		0.00		0.0										
2005	04	18	66	51		0.00		0.0										
2005	04	19	71	45		0.00		0.0										
2005	04	20	87	52		0.03		0.0										
2005	04	21	54	41		0.07		0.0										
2005	04	22	61	39		T		0.0										
2005	04	23	63	44		0.49		0.0										
2005	04	24	60	44		0.30		0.0										
2005	04	25	53	41		0.06		0.0										
2005	04	26	68	42		0.00		0.0										
2005	04	27	53	46		0.32		0.0										
2005	04	28	60	46		T		0.0										
2005	04	29	64	43		0.00		0.0										
2005	04	30	57	46		0.32		0.0										
		Summary	58	41		3.17		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	05	01	59	50		0.10		0.0										
2005	05	02	63	44		0.04		0.0										
2005	05	03	59	44		0.00		0.0										
2005	05	04	55	45		T		0.0										
2005	05	05	55	42		0.00		0.0										
2005	05	06	52	43		0.04		0.0										
2005	05	07	47	42		0.56		0.0										
2005	05	08	49	42		0.05		0.0										
2005	05	09	53	46		T		0.0										
2005	05	10	60	49		0.00		0.0										
2005	05	11	76	47		0.00		0.0										
2005	05	12	62	45		0.00		0.0										
2005	05	13	65	39		0.00		0.0										
2005	05	14	59	48		0.00		0.0										
2005	05	15	55	45		0.01		0.0										
2005	05	16	53	44		0.27		0.0										
2005	05	17	61	48		0.00		0.0										
2005	05	18	53	46		0.04		0.0										
2005	05	19	61	46		0.01		0.0										
2005	05	20	64	48		0.00		0.0										
2005	05	21	54	46		0.23		0.0										
2005	05	22	56	46		0.03		0.0										
2005	05	23	52	45		0.06		0.0										
2005	05	24	47	44		0.92		0.0										
2005	05	25	48	41		0.74		0.0										
2005	05	26	52	46		0.54		0.0										
2005	05	27	61	51		T		0.0										
2005	05	28	78	53		0.16		0.0										
2005	05	29	66	53		0.13		0.0										
2005	05	30	71	55		0.04		0.0										
2005	05	31	56	50		0.01		0.0										
Summary			58	46		3.98		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	06	01	59	48		0.00		0.0										
2005	06	02	74	51		0.00		0.0										
2005	06	03	78	51		0.00		0.0										
2005	06	04	76	59		0.00		0.0										
2005	06	05	81	60		0.00		0.0										
2005	06	06	67	53		0.00		0.0										
2005	06	07	88	65		0.00		0.0										
2005	06	08	86	65		0.58		0.0										
2005	06	09	71	62		0.45		0.0										
2005	06	10	84	60		0.00		0.0										
2005	06	11	88	70		0.00		0.0										
2005	06	12	89	71		0.00		0.0										
2005	06	13	90	75		T		0.0										
2005	06	14	80	53		T		0.0										
2005	06	15	54	49		0.06		0.0										
2005	06	16	57	50		0.13		0.0										
2005	06	17	65	52		0.01		0.0										
2005	06	18	63	53		0.00		0.0										
2005	06	19	61	53		0.00		0.0										
2005	06	20	71	52		0.00		0.0										
2005	06	21	84	57		0.00		0.0										
2005	06	22	73	61		0.03		0.0										
2005	06	23	76	55		0.00		0.0										
2005	06	24	86	59		0.00		0.0										
2005	06	25	95	68		0.00		0.0										
2005	06	26	92	68		0.20		0.0										
2005	06	27	78	65		0.00		0.0										
2005	06	28	82	69		0.00		0.0										
2005	06	29	86	72		T		0.0										
2005	06	30	78	62		0.00		0.0										
		Summary	77	60		1.46		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	07	01	72	61		T		0.0										
2005	07	02	83	67		0.00		0.0										
2005	07	03	74	61		0.00		0.0										
2005	07	04	75	61		0.00		0.0										
2005	07	05	88	61		T		0.0										
2005	07	06	72	59		2.04		0.0										
2005	07	07	63	59		0.00		0.0										
2005	07	08	61	56		0.95		0.0										
2005	07	09	78	56		0.20		0.0										
2005	07	10	90	64		0.00		0.0										
2005	07	11	92	66		0.00		0.0										
2005	07	12	70	63		0.00		0.0										
2005	07	13	80	62		0.00		0.0										
2005	07	14	86	67		0.00		0.0										
2005	07	15	82	68		0.00		0.0										
2005	07	16	86	65		0.00		0.0										
2005	07	17	84	69		0.00		0.0										
2005	07	18	86	73		0.03		0.0										
2005	07	19	93	74		T		0.0										
2005	07	20	91	76		0.00		0.0										
2005	07	21	83	71		0.00		0.0										
2005	07	22	91	71		0.15		0.0										
2005	07	23	85	68		0.00		0.0										
2005	07	24	80	66		0.00		0.0										
2005	07	25	83	67		0.00		0.0										
2005	07	26	94	69		0.00		0.0										
2005	07	27	94	71		T		0.0										
2005	07	28	73	63		0.00		0.0										
2005	07	29	83	63		0.00		0.0										
2005	07	30	76	64		0.00		0.0										
2005	07	31	69	64		T		0.0										
		Summary	81	65		3.37		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	08	01	85	64		0.56		0.0										
2005	08	02	89	68		0.01		0.0										
2005	08	03	87	67		T		0.0										
2005	08	04	80	67		0.00		0.0										
2005	08	05	97	71		0.55		0.0										
2005	08	06	78	65		0.00		0.0										
2005	08	07	86	64		0.00		0.0										
2005	08	08	85	68		0.00		0.0										
2005	08	09	87	71		0.02		0.0										
2005	08	10	88	72		0.00		0.0										
2005	08	11	92	71		0.23		0.0										
2005	08	12	79	66		T		0.0										
2005	08	13	95	74		0.07		0.0										
2005	08	14	85	67		0.60		0.0										
2005	08	15	68	62		0.13		0.0										
2005	08	16	71	60		0.00		0.0										
2005	08	17	85	68		0.00		0.0										
2005	08	18	75	62		0.00		0.0										
2005	08	19	73	61		0.00		0.0										
2005	08	20	74	65		0.00		0.0										
2005	08	21	88	69		0.02		0.0										
2005	08	22	86	68		0.00		0.0										
2005	08	23	80	64		0.00		0.0										
2005	08	24	73	63		T		0.0										
2005	08	25	76	60		0.00		0.0										
2005	08	26	81	63		0.00		0.0										
2005	08	27	83	64		0.00		0.0										
2005	08	28	86	65		T		0.0										
2005	08	29	82	71		0.33		0.0										
2005	08	30	73	69		0.33		0.0										
2005	08	31	83	72		0.03		0.0										
		Summary	82	66		2.88		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	09	01	84	68		0.19		0.0										
2005	09	02	85	66		0.00		0.0										
2005	09	03	83	66		0.00		0.0										
2005	09	04	78	64		0.00		0.0										
2005	09	05	70	59		0.00		0.0										
2005	09	06	72	58		0.00		0.0										
2005	09	07	78	59		0.00		0.0										
2005	09	08	85	62		0.00		0.0										
2005	09	09	70	64		0.00		0.0										
2005	09	10	71	58		0.00		0.0										
2005	09	11	74	53		0.00		0.0										
2005	09	12	91	63		0.00		0.0										
2005	09	13	76	65		0.00		0.0										
2005	09	14	86	65		0.00		0.0										
2005	09	15	75	67		0.98		0.0										
2005	09	16	70	64		0.12		0.0										
2005	09	17	68	62		0.01		0.0										
2005	09	18	72	62		0.00		0.0										
2005	09	19	82	58		0.00		0.0										
2005	09	20	76	62		0.01		0.0										
2005	09	21	79	64		0.00		0.0										
2005	09	22	85	60		0.00		0.0										
2005	09	23	80	60		T		0.0										
2005	09	24	62	51		0.00		0.0										
2005	09	25	67	48		0.00		0.0										
2005	09	26	75	64		0.22		0.0										
2005	09	27	72	58		0.01		0.0										
2005	09	28	67	51		0.00		0.0										
2005	09	29	77	52		0.24		0.0										
2005	09	30	60	49		0.00		0.0										
		Summary	76	60		1.78		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	10	01	71	48		0.00		0.0										
2005	10	02	69	53		0.00		0.0										
2005	10	03	70	50		0.00		0.0										
2005	10	04	70	56		0.00		0.0										
2005	10	05	73	57		0.00		0.0										
2005	10	06	79	61		0.00		0.0										
2005	10	07	81	64		0.03		0.0										
2005	10	08	74	52		1.02		0.0										
2005	10	09	56	51		0.92		0.0										
2005	10	10	56	53		0.09		0.0										
2005	10	11	58	52		0.22		0.0										
2005	10	12	56	51		0.02		0.0										
2005	10	13	59	55		0.06		0.0										
2005	10	14	59	56		1.22		0.0										
2005	10	15	61	53		2.89		0.0										
2005	10	16	60	52		0.00		0.0										
2005	10	17	63	50		0.00		0.0										
2005	10	18	65	46		0.02		0.0										
2005	10	19	67	52		T		0.0										
2005	10	20	58	47		0.00		0.0										
2005	10	21	58	44		0.00		0.0										
2005	10	22	50	40		0.64		0.0										
2005	10	23	49	45		0.46		0.0										
2005	10	24	50	41		0.11		0.0										
2005	10	25	51	40		1.26		0.0										
2005	10	26	49	39		T		0.0										
2005	10	27	51	39		0.00		0.0										
2005	10	28	46	40		0.00		0.0										
2005	10	29	41	33		0.45		1.1										
2005	10	30	67	40		0.00		0.0										
2005	10	31	70	45		0.00		0.0										
		Summary	61	49		9.41		1.1										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	11	01	70	45		0.00		0.0										
2005	11	02	58	45		T		0.0										
2005	11	03	64	40		0.00		0.0										
2005	11	04	60	48		0.00		0.0										
2005	11	05	60	49		0.00		0.0										
2005	11	06	59	47		0.22		0.0										
2005	11	07	59	48		0.01		0.0										
2005	11	08	60	45		0.00		0.0										
2005	11	09	59	36		0.22		0.0										
2005	11	10	60	37		0.36		0.0										
2005	11	11	43	34		0.00		0.0										
2005	11	12	51	31		0.00		0.0										
2005	11	13	63	40		0.00		0.0										
2005	11	14	65	43		0.00		0.0										
2005	11	15	50	40		0.10		0.0										
2005	11	16	66	45		0.21		0.0										
2005	11	17	50	35		0.15		0.0										
2005	11	18	40	32		0.00		0.0										
2005	11	19	43	28		0.00		0.0										
2005	11	20	56	35		0.00		0.0										
2005	11	21	58	41		0.16		0.0										
2005	11	22	49	37		1.61		0.0										
2005	11	23	37	26		T		T										
2005	11	24	43	26		0.03		T										
2005	11	25	33	21		0.00		0.0										
2005	11	26	38	24		T		T										
2005	11	27	44	31		T		0.0										
2005	11	28	53	39		T		0.0										
2005	11	29	61	45		0.00		0.0										
2005	11	30	60	47		0.64		0.0										
		Summary	54	38		3.71		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2005	12	01	47	39		0.00		0.0										
2005	12	02	43	34		T		0.0										
2005	12	03	37	30		0.00		0.0										
2005	12	04	31	26		0.12		1.9										
2005	12	05	34	25		0.00		0.0										
2005	12	06	36	29		T		T										
2005	12	07	31	20		T		T										
2005	12	08	33	19		0.00		0.0										
2005	12	09	37	26		0.63		8.6										
2005	12	10	36	28		0.00		0.0										
2005	12	11	41	27		0.00		0.0										
2005	12	12	40	26		0.00		0.0										
2005	12	13	26	13		T		T										
2005	12	14	25	10		0.00		0.0										
2005	12	15	31	13		T		T										
2005	12	16	48	30		0.84		T										
2005	12	17	39	32		0.00		0.0										
2005	12	18	36	29		0.00		0.0										
2005	12	19	34	25		T		T										
2005	12	20	35	22		0.00		0.0										
2005	12	21	30	20		0.00		0.0										
2005	12	22	33	25		0.00		0.0										
2005	12	23	47	32		T		0.0										
2005	12	24	51	35		0.00		0.0										
2005	12	25	45	30		0.21		0.0										
2005	12	26	47	33		0.77		0.0										
2005	12	27	41	29		0.01		0.1										
2005	12	28	42	27		0.00		0.0										
2005	12	29	51	39		0.24		0.0										
2005	12	30	47	28		T		0.0										
2005	12	31	34	23		0.05		0.1										
		Summary	38	27		2.87		10.7										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

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U.S. Department of Commerce
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Record of Climatological Observations

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	01	01	34	22		0.07		1.0										
2006	01	02	38	27		0.09		T										
2006	01	03	39	28		0.26		T										
2006	01	04	32	26		0.00		T										
2006	01	05	39	29		0.21		0.3										
2006	01	06	39	31		0.00		0.0										
2006	01	07	32	24		0.00		0.0										
2006	01	08	35	26		0.12		0.3										
2006	01	09	48	30		0.00		0.0										
2006	01	10	44	34		0.00		0.0										
2006	01	11	55	34		0.05		0.0										
2006	01	12	55	42		0.20		0.0										
2006	01	13	55	35		0.00		0.0										
2006	01	14	59	42		0.90		0.0										
2006	01	15	41	11		0.39		T										
2006	01	16	32	10		0.00		0.0										
2006	01	17	37	24		T		0.0										
2006	01	18	60	38		0.69		0.0										
2006	01	19	43	34		0.00		0.0										
2006	01	20	57	35		0.00		0.0										
2006	01	21	60	37		0.00		0.0										
2006	01	22	38	28		0.00		0.0										
2006	01	23	35	31		0.79		4.4										
2006	01	24	39	31		0.00		0.0										
2006	01	25	42	32		0.31		1.1										
2006	01	26	37	23		0.02		0.5										
2006	01	27	38	21		0.00		0.0										
2006	01	28	53	35		0.00		0.0										
2006	01	29	47	36		0.34		0.0										
2006	01	30	41	34		T		0.0										
2006	01	31	40	28		0.16		0.5										
		Summary	43	30		4.60		8.1										

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Asheville, North Carolina 28801

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	02	01	42	30		0.00		0.0										
2006	02	02	45	31		0.00		0.0										
2006	02	03	55	38		0.61		0.0										
2006	02	04	49	39		0.45		0.0										
2006	02	05	51	40		0.34		0.0										
2006	02	06	40	33		T		T										
2006	02	07	37	27		0.00		0.0										
2006	02	08	35	23		0.00		0.0										
2006	02	09	34	20		0.00		0.0										
2006	02	10	29	16		0.00		0.0										
2006	02	11	28	18		0.00		0.0										
2006	02	12	28	16		0.98		17.5										
2006	02	13	33	17		0.00		0.0										
2006	02	14	40	27		0.00		0.0										
2006	02	15	54	30		0.00		0.0										
2006	02	16	54	34		0.00		0.0										
2006	02	17	57	28		0.08		0.0										
2006	02	18	32	11		T		T										
2006	02	19	29	9		0.00		0.0										
2006	02	20	34	20		0.00		0.0										
2006	02	21	40	22		0.00		0.0										
2006	02	22	41	28		0.00		0.0										
2006	02	23	43	30		0.05		0.0										
2006	02	24	37	24		T		T										
2006	02	25	28	19		0.06		1.3										
2006	02	26	23	13		0.07		1.2										
2006	02	27	22	7		0.00		0.0										
2006	02	28	28	16		0.00		0.0										
		Summary	38	24		2.64		20.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	03	01	33	18		0.00		0.0										
2006	03	02	35	23		T		T										
2006	03	03	31	20		T		T										
2006	03	04	40	20		T		0.0										
2006	03	05	46	28		0.00		0.0										
2006	03	06	38	26		0.00		0.0										
2006	03	07	40	26		0.00		0.0										
2006	03	08	38	27		0.00		0.0										
2006	03	09	42	34		T		0.0										
2006	03	10	66	38		0.00		0.0										
2006	03	11	59	43		0.00		0.0										
2006	03	12	57	35		T		0.0										
2006	03	13	53	40		0.30		0.0										
2006	03	14	58	36		0.25		0.0										
2006	03	15	41	32		T		T										
2006	03	16	43	30		0.00		0.0										
2006	03	17	41	24		0.00		0.0										
2006	03	18	38	22		T		0.0										
2006	03	19	36	24		T		T										
2006	03	20	34	22		0.00		0.0										
2006	03	21	47	23		0.00		0.0										
2006	03	22	42	31		0.00		0.0										
2006	03	23	56	33		0.00		0.0										
2006	03	24	45	36		0.00		0.0										
2006	03	25	42	36		0.01		0.0										
2006	03	26	50	36		T		0.0										
2006	03	27	57	37		0.00		0.0										
2006	03	28	50	36		0.00		0.0										
2006	03	29	55	34		0.00		0.0										
2006	03	30	59	43		0.00		0.0										
2006	03	31	73	40		0.00		0.0										
		Summary	47	31		0.56		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	04	01	70	49		0.06		0.0										
2006	04	02	64	46		0.00		0.0										
2006	04	03	52	39		0.05		0.0										
2006	04	04	51	37		0.36		0.0										
2006	04	05	39	33		0.20		T										
2006	04	06	53	34		0.00		0.0										
2006	04	07	61	37		0.11		0.0										
2006	04	08	53	38		0.12		0.0										
2006	04	09	44	35		0.00		0.0										
2006	04	10	57	37		0.00		0.0										
2006	04	11	58	39		0.00		0.0										
2006	04	12	69	41		T		0.0										
2006	04	13	69	54		0.01		0.0										
2006	04	14	68	45		0.03		0.0										
2006	04	15	77	47		T		0.0										
2006	04	16	59	46		0.00		0.0										
2006	04	17	53	43		0.01		0.0										
2006	04	18	64	46		0.01		0.0										
2006	04	19	73	49		T		0.0										
2006	04	20	64	45		0.00		0.0										
2006	04	21	49	43		0.00		0.0										
2006	04	22	48	39		0.11		0.0										
2006	04	23	48	43		0.61		0.0										
2006	04	24	48	44		0.13		0.0										
2006	04	25	70	43		0.02		0.0										
2006	04	26	60	38		0.00		0.0										
2006	04	27	55	43		0.00		0.0										
2006	04	28	50	40		0.00		0.0										
2006	04	29	55	39		0.00		0.0										
2006	04	30	56	40		0.00		0.0										
		Summary	58	42		1.83		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	05	01	55	44		0.01		0.0										
2006	05	02	47	44		0.91		0.0										
2006	05	03	54	45		0.26		0.0										
2006	05	04	71	53		0.00		0.0										
2006	05	05	80	55		0.00		0.0										
2006	05	06	68	54		0.00		0.0										
2006	05	07	61	46		0.00		0.0										
2006	05	08	58	46		0.00		0.0										
2006	05	09	54	47		0.96		0.0										
2006	05	10	50	47		0.55		0.0										
2006	05	11	52	47		0.08		0.0										
2006	05	12	51	48		0.37		0.0										
2006	05	13	50	46		3.84		0.0										
2006	05	14	49	46		3.77		0.0										
2006	05	15	50	47		0.36		0.0										
2006	05	16	56	48		0.52		0.0										
2006	05	17	69	50		0.00		0.0										
2006	05	18	76	52		0.00		0.0										
2006	05	19	65	52		0.47		0.0										
2006	05	20	68	50		T		0.0										
2006	05	21	68	45		0.11		0.0										
2006	05	22	66	45		0.00		0.0										
2006	05	23	63	46		0.00		0.0										
2006	05	24	68	51		T		0.0										
2006	05	25	77	47		0.00		0.0										
2006	05	26	78	58		0.27		0.0										
2006	05	27	74	60		T		0.0										
2006	05	28	72	62		0.00		0.0										
2006	05	29	84	62		0.00		0.0										
2006	05	30	70	55		0.00		0.0										
2006	05	31	79	54		0.00		0.0										
		Summary	64	50		12.48		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	06	01	89	64		0.12		0.0										
2006	06	02	71	59		0.53		0.0										
2006	06	03	59	52		1.91		0.0										
2006	06	04	61	52		0.30		0.0										
2006	06	05	70	57		0.00		0.0										
2006	06	06	65	56		T		0.0										
2006	06	07	58	53		2.89		0.0										
2006	06	08	61	52		0.20		0.0										
2006	06	09	63	57		0.06		0.0										
2006	06	10	61	53		0.43		0.0										
2006	06	11	73	52		0.00		0.0										
2006	06	12	77	58		0.00		0.0										
2006	06	13	74	62		0.00		0.0										
2006	06	14	73	61		0.00		0.0										
2006	06	15	78	60		0.10		0.0										
2006	06	16	80	61		0.00		0.0										
2006	06	17	85	66		T		0.0										
2006	06	18	91	64		0.00		0.0										
2006	06	19	93	72		0.00		0.0										
2006	06	20	84	69		0.37		0.0										
2006	06	21	79	64		0.00		0.0										
2006	06	22	85	63		0.00		0.0										
2006	06	23	84	67		1.36		0.0										
2006	06	24	70	65		0.69		0.0										
2006	06	25	66	62		0.95		0.0										
2006	06	26	83	62		T		0.0										
2006	06	27	84	68		0.00		0.0										
2006	06	28	77	68		0.05		0.0										
2006	06	29	78	70		0.00		0.0										
2006	06	30	81	65		0.13		0.0										
		Summary	75	61		10.09		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	07	01	85	66		0.00		0.0										
2006	07	02	87	69		T		0.0										
2006	07	03	84	72		0.00		0.0										
2006	07	04	88	68		T		0.0										
2006	07	05	81	71		0.00		0.0										
2006	07	06	77	65		0.15		0.0										
2006	07	07	83	63		0.00		0.0										
2006	07	08	76	62		0.00		0.0										
2006	07	09	88	62		0.00		0.0										
2006	07	10	87	67		0.00		0.0										
2006	07	11	84	68		0.02		0.0										
2006	07	12	80	64		1.02		0.0										
2006	07	13	75	65		0.17		0.0										
2006	07	14	92	67		0.00		0.0										
2006	07	15	89	69		0.00		0.0										
2006	07	16	85	68		0.00		0.0										
2006	07	17	92	70		0.00		0.0										
2006	07	18	96	71		0.22		0.0										
2006	07	19	77	66		0.19		0.0										
2006	07	20	72	64		T		0.0										
2006	07	21	88	68		1.29		0.0										
2006	07	22	78	68		0.12		0.0										
2006	07	23	77	69		0.11		0.0										
2006	07	24	85	63		0.00		0.0										
2006	07	25	87	68		0.00		0.0										
2006	07	26	88	70		0.00		0.0										
2006	07	27	91	71		0.00		0.0										
2006	07	28	92	73		0.29		0.0										
2006	07	29	90	71		0.00		0.0										
2006	07	30	84	66		0.00		0.0										
2006	07	31	80	66		0.00		0.0										
		Summary	84	67		3.58		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	08	01	94	77		0.02		0.0										
2006	08	02	98	78		0.00		0.0										
2006	08	03	95	67		0.00		0.0										
2006	08	04	74	67		0.31		0.0										
2006	08	05	84	69		0.00		0.0										
2006	08	06	75	64		0.00		0.0										
2006	08	07	86	68		0.04		0.0										
2006	08	08	83	68		0.00		0.0										
2006	08	09	77	64		0.00		0.0										
2006	08	10	86	67		T		0.0										
2006	08	11	73	61		0.00		0.0										
2006	08	12	77	57		0.00		0.0										
2006	08	13	78	59		0.00		0.0										
2006	08	14	86	60		0.00		0.0										
2006	08	15	82	70		0.53		0.0										
2006	08	16	83	66		0.00		0.0										
2006	08	17	76	66		0.00		0.0										
2006	08	18	82	66		0.00		0.0										
2006	08	19	84	64		T		0.0										
2006	08	20	84	63		0.80		0.0										
2006	08	21	77	62		0.00		0.0										
2006	08	22	84	65		0.00		0.0										
2006	08	23	73	65		0.00		0.0										
2006	08	24	71	63		0.01		0.0										
2006	08	25	65	59		0.84		0.0										
2006	08	26	69	58		0.00		0.0										
2006	08	27	67	57		0.40		0.0										
2006	08	28	72	59		0.11		0.0										
2006	08	29	62	60		0.14		0.0										
2006	08	30	73	61		0.00		0.0										
2006	08	31	74	55		0.00		0.0										
		Summary	79	64		3.20		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	09	01	69	60		0.00		0.0										
2006	09	02	66	62		T		0.0										
2006	09	03	67	61		0.25		0.0										
2006	09	04	76	62		0.00		0.0										
2006	09	05	72	61		0.07		0.0										
2006	09	06	74	62		0.01		0.0										
2006	09	07	73	62		0.00		0.0										
2006	09	08	80	62		0.00		0.0										
2006	09	09	84	63		T		0.0										
2006	09	10	67	56		0.00		0.0										
2006	09	11	66	52		0.00		0.0										
2006	09	12	67	50		0.00		0.0										
2006	09	13	67	50		T		0.0										
2006	09	14	71	58		0.30		0.0										
2006	09	15	71	61		0.00		0.0										
2006	09	16	74	59		0.00		0.0										
2006	09	17	77	61		0.00		0.0										
2006	09	18	83	62		0.00		0.0										
2006	09	19	82	63		0.50		0.0										
2006	09	20	74	58		0.07		0.0										
2006	09	21	66	53		0.00		0.0										
2006	09	22	70	52		0.00		0.0										
2006	09	23	71	59		0.04		0.0										
2006	09	24	83	64		T		0.0										
2006	09	25	68	54		T		0.0										
2006	09	26	71	54		0.00		0.0										
2006	09	27	69	50		0.00		0.0										
2006	09	28	68	53		0.00		0.0										
2006	09	29	68	51		0.48		0.0										
2006	09	30	61	45		0.00		0.0										
		Summary	72	57		1.72		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	10	01	60	53		0.38		0.0										
2006	10	02	68	50		0.00		0.0										
2006	10	03	76	50		T		0.0										
2006	10	04	77	58		T		0.0										
2006	10	05	69	52		0.12		0.0										
2006	10	06	58	47		0.00		0.0										
2006	10	07	59	47		0.00		0.0										
2006	10	08	66	45		0.00		0.0										
2006	10	09	80	50		0.00		0.0										
2006	10	10	64	54		0.00		0.0										
2006	10	11	60	52		0.85		0.0										
2006	10	12	73	59		0.39		0.0										
2006	10	13	60	44		T		0.0										
2006	10	14	61	41		0.00		0.0										
2006	10	15	57	41		0.00		0.0										
2006	10	16	57	43		0.00		0.0										
2006	10	17	55	43		0.13		0.0										
2006	10	18	71	53		T		0.0										
2006	10	19	65	54		T		0.0										
2006	10	20	64	45		0.40		0.0										
2006	10	21	56	42		0.00		0.0										
2006	10	22	57	38		T		0.0										
2006	10	23	56	46		0.21		0.0										
2006	10	24	54	43		T		0.0										
2006	10	25	55	42		0.00		0.0										
2006	10	26	51	40		0.00		0.0										
2006	10	27	49	37		0.00		0.0										
2006	10	28	63	46		2.02		0.0										
2006	10	29	53	45		0.00		0.0										
2006	10	30	58	44		0.00		0.0										
2006	10	31	65	44		0.00		0.0										
		Summary	62	47		4.50		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	11	01	68	50		0.09		0.0										
2006	11	02	53	40		0.23		0.0										
2006	11	03	48	35		0.00		0.0										
2006	11	04	48	34		0.00		0.0										
2006	11	05	48	34		0.00		0.0										
2006	11	06	57	39		0.00		0.0										
2006	11	07	58	38		0.14		0.0										
2006	11	08	55	50		1.19		0.0										
2006	11	09	65	53		0.08		0.0										
2006	11	10	63	46		0.00		0.0										
2006	11	11	66	42		0.00		0.0										
2006	11	12	58	49		0.45		0.0										
2006	11	13	54	49		0.52		0.0										
2006	11	14	62	51		0.35		0.0										
2006	11	15	63	52		T		0.0										
2006	11	16	69	53		0.15		0.0										
2006	11	17	68	50		0.49		0.0										
2006	11	18	53	43		0.00		0.0										
2006	11	19	45	41		0.00		0.0										
2006	11	20	44	33		0.00		0.0										
2006	11	21	42	32		0.00		0.0										
2006	11	22	46	34		0.00		0.0										
2006	11	23	47	39		1.83		0.0										
2006	11	24	53	42		0.27		0.0										
2006	11	25	45	34		0.00		0.0										
2006	11	26	58	36		0.00		0.0										
2006	11	27	62	43		0.00		0.0										
2006	11	28	54	39		0.01		0.0										
2006	11	29	53	39		T		0.0										
2006	11	30	69	52		0.00		0.0										
		Summary	56	42		5.80		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2006	12	01	67	59		0.18		0.0										
2006	12	02	62	39		0.00		0.0										
2006	12	03	45	35		0.00		0.0										
2006	12	04	41	30		0.19		0.3										
2006	12	05	34	28		0.00		0.0										
2006	12	06	46	25		0.00		0.0										
2006	12	07	54	34		T		0.0										
2006	12	08	34	20		0.01		0.1										
2006	12	09	38	24		0.00		0.0										
2006	12	10	52	34		0.00		0.0										
2006	12	11	48	35		T		0.0										
2006	12	12	45	33		0.00		0.0										
2006	12	13	52	40		0.10		0.0										
2006	12	14	57	44		0.00		0.0										
2006	12	15	54	43		0.00		0.0										
2006	12	16	53	40		0.01		0.0										
2006	12	17	56	36		0.00		0.0										
2006	12	18	55	42		0.02		0.0										
2006	12	19	43	32		0.00		0.0										
2006	12	20	43	29		0.00		0.0										
2006	12	21	52	39		0.00		0.0										
2006	12	22	43	32		0.06		0.0										
2006	12	23	58	43		0.81		0.0										
2006	12	24	50	38		0.00		0.0										
2006	12	25	46	33		0.09		0.0										
2006	12	26	49	39		0.34		0.0										
2006	12	27	43	34		T		T										
2006	12	28	44	31		0.00		0.0										
2006	12	29	34	25		0.00		0.0										
2006	12	30	37	25		0.08		0.4										
2006	12	31	40	27		0.00		0.0										
		Summary	48	34		1.89		0.8										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	01	01	48	33		0.86		0.0										
2007	01	02	45	35		T		0.0										
2007	01	03	51	35		0.00		0.0										
2007	01	04	53	39		0.00		0.0										
2007	01	05	63	48		0.01		0.0										
2007	01	06	69	51		0.07		0.0										
2007	01	07	51	43		0.00		0.0										
2007	01	08	53	40		0.57		0.0										
2007	01	09	43	34		0.00		0.0										
2007	01	10	36	24		0.00		0.0										
2007	01	11	35	21		0.00		0.0										
2007	01	12	50	35		0.00		0.0										
2007	01	13	51	38		0.06		0.0										
2007	01	14	40	31		0.13		0.0										
2007	01	15	41	30		0.64		0.0										
2007	01	16	41	18		0.06		0.0										
2007	01	17	19	8		0.00		0.0										
2007	01	18	39	13		0.12		T										
2007	01	19	40	33		0.01		T										
2007	01	20	33	16		T		T										
2007	01	21	26	13		0.00		0.0										
2007	01	22	27	21		0.02		0.6										
2007	01	23	32	21		T		0.1										
2007	01	24	42	25		0.00		0.0										
2007	01	25	28	7		0.00		0.0										
2007	01	26	13	3		0.00		0.0										
2007	01	27	27	6		T		T										
2007	01	28	39	25		0.02		0.3										
2007	01	29	28	19		T		T										
2007	01	30	31	18		0.00		0.0										
2007	01	31	33	19		T		T										
Summary			40	26		2.57		1.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	02	01	37	23		0.00		0.0										
2007	02	02	37	28		0.19		T										
2007	02	03	35	22		0.06		T										
2007	02	04	25	15		0.00		0.0										
2007	02	05	19	10		0.00		0.0										
2007	02	06	27	15		0.00		0.0										
2007	02	07	24	12		0.00		0.0										
2007	02	08	27	15		0.00		0.0										
2007	02	09	29	19		T		T										
2007	02	10	33	18		0.00		0.0										
2007	02	11	31	19		0.00		0.0										
2007	02	12	37	21		0.00		0.0										
2007	02	13	22	9		T		T										
2007	02	14	37	15		1.62		2.5										
2007	02	15	22	12		0.00		0.0										
2007	02	16	29	10		0.00		0.0										
2007	02	17	35	22		0.00		0.0										
2007	02	18	34	19		0.00		0.0										
2007	02	19	22	8		0.00		0.0										
2007	02	20	49	20		T		0.0										
2007	02	21	45	34		T		0.0										
2007	02	22	40	27		0.02		T										
2007	02	23	34	18		0.01		0.5										
2007	02	24	35	15		0.00		0.0										
2007	02	25	43	24		T		0.0										
2007	02	26	36	31		0.30		1.6										
2007	02	27	38	30		0.00		0.0										
2007	02	28	41	30		0.00		0.0										
		Summary	33	19		2.20		4.6										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	03	01	40	26		0.00		0.0										
2007	03	02	44	32		1.48		T										
2007	03	03	57	30		0.00		0.0										
2007	03	04	41	30		0.00		0.0										
2007	03	05	39	22		T		T										
2007	03	06	23	6		0.00		0.0										
2007	03	07	24	6		0.00		0.0										
2007	03	08	26	7		0.00		0.0										
2007	03	09	31	5		0.00		0.0										
2007	03	10	52	23		0.00		0.0										
2007	03	11	53	39		0.27		0.0										
2007	03	12	55	35		0.00		0.0										
2007	03	13	61	38		0.00		0.0										
2007	03	14	68	45		0.00		0.0										
2007	03	15	57	38		0.12		0.0										
2007	03	16	38	26		0.42		7.9										
2007	03	17	36	28		1.46		0.2										
2007	03	18	34	24		0.00		0.0										
2007	03	19	40	27		0.05		1.0										
2007	03	20	44	24		0.02		T										
2007	03	21	35	20		0.00		0.0										
2007	03	22	57	34		T		0.0										
2007	03	23	59	40		0.00		0.0										
2007	03	24	46	32		0.34		1.1										
2007	03	25	46	34		T		T										
2007	03	26	47	36		0.11		0.0										
2007	03	27	58	42		0.04		0.0										
2007	03	28	56	39		0.00		0.0										
2007	03	29	52	33		0.00		0.0										
2007	03	30	61	38		0.00		0.0										
2007	03	31	46	36		0.00		0.0										
		Summary	46	29		4.31		10.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	04	01	52	33		0.17		0.0										
2007	04	02	41	38		0.15		0.0										
2007	04	03	44	36		0.01		0.0										
2007	04	04	39	35		0.94		0.3										
2007	04	05	45	30		0.27		0.2										
2007	04	06	39	28		0.00		0.0										
2007	04	07	42	30		0.00		0.0										
2007	04	08	42	29		0.00		0.0										
2007	04	09	50	34		0.00		0.0										
2007	04	10	44	35		0.00		0.0										
2007	04	11	50	34		0.00		0.0										
2007	04	12	41	35		0.87		T										
2007	04	13	49	35		0.00		0.0										
2007	04	14	52	39		0.00		0.0										
2007	04	15	44	38		1.42		0.0										
2007	04	16	48	42		0.93		0.0										
2007	04	17	42	37		0.16		T										
2007	04	18	43	39		0.05		0.0										
2007	04	19	51	39		T		0.0										
2007	04	20	51	36		0.00		0.0										
2007	04	21	75	44		0.00		0.0										
2007	04	22	67	49		0.00		0.0										
2007	04	23	86	52		0.00		0.0										
2007	04	24	73	52		0.00		0.0										
2007	04	25	59	45		0.17		0.0										
2007	04	26	58	42		0.00		0.0										
2007	04	27	50	44		1.06		0.0										
2007	04	28	52	44		0.37		0.0										
2007	04	29	49	44		0.06		0.0										
2007	04	30	71	43		0.08		0.0										
		Summary	52	39		6.71		0.5										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	05	01	68	48		0.00		0.0										
2007	05	02	66	48		0.08		0.0										
2007	05	03	68	47		0.00		0.0										
2007	05	04	68	50		0.00		0.0										
2007	05	05	67	48		T		0.0										
2007	05	06	51	44		0.00		0.0										
2007	05	07	65	42		0.00		0.0										
2007	05	08	80	47		0.00		0.0										
2007	05	09	86	57		0.00		0.0										
2007	05	10	84	62		T		0.0										
2007	05	11	76	62		0.07		0.0										
2007	05	12	69	50		0.00		0.0										
2007	05	13	66	51		0.00		0.0										
2007	05	14	75	47		0.00		0.0										
2007	05	15	82	54		0.09		0.0										
2007	05	16	64	46		0.79		0.0										
2007	05	17	50	46		T		0.0										
2007	05	18	46	42		1.72		0.0										
2007	05	19	53	43		0.43		0.0										
2007	05	20	64	50		0.52		0.0										
2007	05	21	66	50		T		0.0										
2007	05	22	67	48		T		0.0										
2007	05	23	73	50		0.00		0.0										
2007	05	24	80	53		0.00		0.0										
2007	05	25	92	70		T		0.0										
2007	05	26	86	65		0.00		0.0										
2007	05	27	71	57		0.00		0.0										
2007	05	28	84	59		T		0.0										
2007	05	29	79	59		0.00		0.0										
2007	05	30	82	60		0.00		0.0										
2007	05	31	65	57		T		0.0										
		Summary	71	52		3.70		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	06	01	81	58		0.15		0.0										
2007	06	02	86	64		T		0.0										
2007	06	03	73	53		0.11		0.0										
2007	06	04	60	52		1.46		0.0										
2007	06	05	81	59		0.00		0.0										
2007	06	06	72	54		0.00		0.0										
2007	06	07	71	51		0.00		0.0										
2007	06	08	69	59		0.00		0.0										
2007	06	09	65	57		T		0.0										
2007	06	10	71	53		0.00		0.0										
2007	06	11	79	65		0.01		0.0										
2007	06	12	74	59		0.07		0.0										
2007	06	13	60	54		T		0.0										
2007	06	14	60	52		T		0.0										
2007	06	15	66	50		0.00		0.0										
2007	06	16	76	58		T		0.0										
2007	06	17	88	63		0.02		0.0										
2007	06	18	81	64		0.00		0.0										
2007	06	19	82	66		0.00		0.0										
2007	06	20	79	66		0.16		0.0										
2007	06	21	81	62		0.09		0.0										
2007	06	22	74	59		0.03		0.0										
2007	06	23	72	56		0.00		0.0										
2007	06	24	79	57		0.00		0.0										
2007	06	25	89	65		0.00		0.0										
2007	06	26	95	67		0.00		0.0										
2007	06	27	96	76		0.00		0.0										
2007	06	28	92	76		0.02		0.0										
2007	06	29	77	63		0.00		0.0										
2007	06	30	82	62		0.00		0.0										
		Summary	77	60		2.12		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	07	01	74	59		0.21		0.0										
2007	07	02	76	56		0.00		0.0										
2007	07	03	72	58		0.00		0.0										
2007	07	04	82	61		0.05		0.0										
2007	07	05	83	64		0.31		0.0										
2007	07	06	85	66		T		0.0										
2007	07	07	84	65		0.00		0.0										
2007	07	08	91	63		0.02		0.0										
2007	07	09	71	62		0.23		0.0										
2007	07	10	69	61		0.00		0.0										
2007	07	11	87	65		T		0.0										
2007	07	12	84	69		0.05		0.0										
2007	07	13	87	65		0.00		0.0										
2007	07	14	79	68		T		0.0										
2007	07	15	90	68		T		0.0										
2007	07	16	81	65		0.00		0.0										
2007	07	17	82	65		0.00		0.0										
2007	07	18	71	64		0.17		0.0										
2007	07	19	74	61		0.11		0.0										
2007	07	20	85	67		0.01		0.0										
2007	07	21	75	63		0.00		0.0										
2007	07	22	78	64		0.00		0.0										
2007	07	23	67	63		0.06		0.0										
2007	07	24	84	63		T		0.0										
2007	07	25	90	66		0.00		0.0										
2007	07	26	92	68		0.00		0.0										
2007	07	27	92	73		T		0.0										
2007	07	28	87	71		2.32		0.0										
2007	07	29	83	70		0.00		0.0										
2007	07	30	76	67		1.72		0.0										
2007	07	31	81	68		0.00		0.0										
		Summary	81	65		5.26		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	08	01	82	71		0.00		0.0										
2007	08	02	94	70		0.00		0.0										
2007	08	03	95	75		0.00		0.0										
2007	08	04	92	74		0.00		0.0										
2007	08	05	76	67		0.00		0.0										
2007	08	06	78	63		0.24		0.0										
2007	08	07	74	65		0.00		0.0										
2007	08	08	91	68		0.28		0.0										
2007	08	09	76	65		0.00		0.0										
2007	08	10	66	59		0.09		0.0										
2007	08	11	81	56		0.00		0.0										
2007	08	12	85	68		0.00		0.0										
2007	08	13	85	67		T		0.0										
2007	08	14	75	63		0.00		0.0										
2007	08	15	86	62		0.00		0.0										
2007	08	16	89	69		0.00		0.0										
2007	08	17	80	67		T		0.0										
2007	08	18	74	58		0.04		0.0										
2007	08	19	74	57		0.00		0.0										
2007	08	20	68	56		0.00		0.0										
2007	08	21	67	55		0.00		0.0										
2007	08	22	69	55		0.00		0.0										
2007	08	23	70	63		0.00		0.0										
2007	08	24	91	69		0.00		0.0										
2007	08	25	96	72		0.00		0.0										
2007	08	26	86	72		0.00		0.0										
2007	08	27	76	64		0.00		0.0										
2007	08	28	78	62		0.00		0.0										
2007	08	29	82	64		0.00		0.0										
2007	08	30	89	67		0.00		0.0										
2007	08	31	75	64		0.01		0.0										
		Summary	81	65		0.66		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	09	01	79	62		0.00		0.0										
2007	09	02	73	56		0.00		0.0										
2007	09	03	87	60		0.00		0.0										
2007	09	04	78	64		0.00		0.0										
2007	09	05	73	59		0.00		0.0										
2007	09	06	78	58		0.00		0.0										
2007	09	07	94	65		0.00		0.0										
2007	09	08	95	71		T		0.0										
2007	09	09	77	60		0.03		0.0										
2007	09	10	66	60		0.01		0.0										
2007	09	11	68	60		1.28		0.0										
2007	09	12	76	60		0.00		0.0										
2007	09	13	73	57		0.00		0.0										
2007	09	14	76	57		0.00		0.0										
2007	09	15	65	54		0.34		0.0										
2007	09	16	61	50		0.00		0.0										
2007	09	17	63	49		0.00		0.0										
2007	09	18	63	47		0.00		0.0										
2007	09	19	64	50		0.00		0.0										
2007	09	20	78	56		0.00		0.0										
2007	09	21	71	59		0.00		0.0										
2007	09	22	80	62		0.00		0.0										
2007	09	23	80	64		0.00		0.0										
2007	09	24	82	59		0.00		0.0										
2007	09	25	88	62		0.00		0.0										
2007	09	26	93	71		0.00		0.0										
2007	09	27	85	68		0.15		0.0										
2007	09	28	80	62		T		0.0										
2007	09	29	74	59		0.00		0.0										
2007	09	30	63	54		0.00		0.0										
		Summary	76	59		1.81		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	10	01	65	52		0.00		0.0										
2007	10	02	65	50		0.00		0.0										
2007	10	03	70	60		0.00		0.0										
2007	10	04	86	62		0.00		0.0										
2007	10	05	82	60		0.00		0.0										
2007	10	06	80	63		0.00		0.0										
2007	10	07	69	54		T		0.0										
2007	10	08	59	54		0.64		0.0										
2007	10	09	61	54		0.01		0.0										
2007	10	10	60	54		0.04		0.0										
2007	10	11	60	58		0.29		0.0										
2007	10	12	65	47		0.04		0.0										
2007	10	13	60	44		0.00		0.0										
2007	10	14	62	47		0.00		0.0										
2007	10	15	63	44		0.00		0.0										
2007	10	16	63	47		0.00		0.0										
2007	10	17	63	44		0.00		0.0										
2007	10	18	69	55		0.00		0.0										
2007	10	19	73	58		0.42		0.0										
2007	10	20	72	58		0.12		0.0										
2007	10	21	75	55		0.00		0.0										
2007	10	22	81	58		0.00		0.0										
2007	10	23	78	58		0.01		0.0										
2007	10	24	66	53		0.04		0.0										
2007	10	25	58	46		0.01		0.0										
2007	10	26	59	44		0.02		0.0										
2007	10	27	70	55		0.44		0.0										
2007	10	28	61	42		0.00		0.0										
2007	10	29	51	37		0.00		0.0										
2007	10	30	63	41		0.00		0.0										
2007	10	31	64	44		0.00		0.0										
		Summary	67	52		2.08		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	11	01	69	48		0.00		0.0										
2007	11	02	51	41		0.00		0.0										
2007	11	03	50	44		0.85		0.0										
2007	11	04	57	42		0.00		0.0										
2007	11	05	53	39		0.00		0.0										
2007	11	06	55	40		0.62		0.0										
2007	11	07	51	37		0.00		0.0										
2007	11	08	45	33		0.00		0.0										
2007	11	09	46	32		0.02		0.0										
2007	11	10	43	32		T		0.0										
2007	11	11	46	28		0.00		0.0										
2007	11	12	45	31		0.03		0.0										
2007	11	13	58	41		0.19		0.0										
2007	11	14	60	37		0.00		0.0										
2007	11	15	66	44		0.32		0.0										
2007	11	16	47	34		0.36		0.0										
2007	11	17	43	33		0.00		0.0										
2007	11	18	43	34		0.00		0.0										
2007	11	19	40	34		T		T										
2007	11	20	41	31		0.08		T										
2007	11	21	46	34		T		0.0										
2007	11	22	60	43		T		0.0										
2007	11	23	43	28		0.00		0.0										
2007	11	24	34	22		0.00		0.0										
2007	11	25	50	31		0.00		0.0										
2007	11	26	58	38		0.30		0.0										
2007	11	27	64	41		0.03		0.0										
2007	11	28	46	35		0.00		0.0										
2007	11	29	51	38		T		0.0										
2007	11	30	42	34		0.00		0.0										
		Summary	50	36		2.80		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2007	12	01	38	18		T		T										
2007	12	02	28	18		0.04		0.3										
2007	12	03	41	28		0.53		1.0										
2007	12	04	30	22		T		T										
2007	12	05	32	24		T		T										
2007	12	06	31	19		0.00		0.0										
2007	12	07	37	23		0.03		0.2										
2007	12	08	44	29		0.00		0.0										
2007	12	09	36	28		0.04		0.0										
2007	12	10	33	29		0.06		0.0										
2007	12	11	37	27		0.06		0.0										
2007	12	12	48	30		0.01		0.0										
2007	12	13	33	22		0.86		10.1										
2007	12	14	41	23		0.01		0.4										
2007	12	15	34	17		0.00		0.0										
2007	12	16	43	22		1.25		7.6										
2007	12	17	36	19		0.00		0.0										
2007	12	18	32	18		0.00		0.0										
2007	12	19	38	22		0.06		T										
2007	12	20	35	29		0.49		7.3										
2007	12	21	29	24		T		T										
2007	12	22	38	26		0.00		0.0										
2007	12	23	51	33		0.49		0.0										
2007	12	24	53	34		0.01		0.0										
2007	12	25	43	32		0.00		0.0										
2007	12	26	40	27		0.18		0.0										
2007	12	27	39	34		0.42		T										
2007	12	28	47	35		0.00		0.0										
2007	12	29	46	37		0.15		0.0										
2007	12	30	42	33		0.09		T										
2007	12	31	41	30		0.47		T										
		Summary	39	26		5.25		26.9										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	01	01	40	28		0.18		T										
2008	01	02	33	10		T		T										
2008	01	03	14	7		0.00		0.0										
2008	01	04	32	8		0.00		0.0										
2008	01	05	42	27		0.00		0.0										
2008	01	06	47	36		0.00		0.0										
2008	01	07	55	35		0.00		0.0										
2008	01	08	67	45		0.00		0.0										
2008	01	09	62	46		T		0.0										
2008	01	10	49	38		0.00		0.0										
2008	01	11	57	38		1.41		0.0										
2008	01	12	48	38		0.00		0.0										
2008	01	13	44	30		0.00		0.0										
2008	01	14	39	28		0.55		7.0										
2008	01	15	35	24		0.00		0.0										
2008	01	16	34	23		0.00		0.0										
2008	01	17	35	21		0.00		0.0										
2008	01	18	47	33		0.38		T										
2008	01	19	35	30		0.00		0.0										
2008	01	20	34	19		0.00		0.0										
2008	01	21	25	15		0.00		0.0										
2008	01	22	40	20		0.03		0.0										
2008	01	23	37	29		0.00		0.0										
2008	01	24	32	22		0.00		0.0										
2008	01	25	31	16		0.00		0.0										
2008	01	26	33	24		0.00		0.0										
2008	01	27	34	24		0.10		1.3										
2008	01	28	41	23		0.00		0.0										
2008	01	29	40	27		0.00		0.0										
2008	01	30	50	32		0.04		0.0										
2008	01	31	36	27		0.00		0.0										
		Summary	40	27		2.69		8.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	02	01	54	26		1.14		T										
2008	02	02	53	38		0.02		0.0										
2008	02	03	45	37		0.00		0.0										
2008	02	04	40	32		0.00		0.0										
2008	02	05	45	36		0.43		T										
2008	02	06	46	36		0.94		0.0										
2008	02	07	37	29		0.66		0.2										
2008	02	08	32	28		0.08		0.8										
2008	02	09	37	23		0.05		0.2										
2008	02	10	43	16		0.05		0.3										
2008	02	11	26	12		0.00		0.0										
2008	02	12	30	16		0.15		2.0										
2008	02	13	40	25		2.66		1.2										
2008	02	14	39	29		T		0.0										
2008	02	15	47	27		0.00		0.0										
2008	02	16	31	20		0.00		0.0										
2008	02	17	45	21		T		0.0										
2008	02	18	62	42		0.54		0.0										
2008	02	19	45	28		T		T										
2008	02	20	31	24		0.00		0.0										
2008	02	21	31	20		0.00		0.0										
2008	02	22	32	23		0.75		8.9										
2008	02	23	34	25		T		T										
2008	02	24	39	22		0.00		0.0										
2008	02	25	47	26		0.00		0.0										
2008	02	26	40	29		0.39		T										
2008	02	27	40	25		0.05		0.9										
2008	02	28	28	17		0.03		0.5										
2008	02	29	25	11		T		T										
		Summary	39	26		7.94		15.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	03	01	39	25		0.24		1.0										
2008	03	02	41	28		0.00		0.0										
2008	03	03	49	26		0.00		0.0										
2008	03	04	60	39		0.36		0.0										
2008	03	05	60	37		0.28		0.0										
2008	03	06	42	34		0.00		0.0										
2008	03	07	43	31		0.17		0.0										
2008	03	08	58	37		1.88		0.0										
2008	03	09	51	29		0.00		0.0										
2008	03	10	39	25		0.00		0.0										
2008	03	11	43	26		0.00		0.0										
2008	03	12	43	34		0.19		0.0										
2008	03	13	38	29		0.00		0.0										
2008	03	14	51	32		T		0.0										
2008	03	15	40	34		0.31		T										
2008	03	16	41	34		T		0.0										
2008	03	17	44	29		0.00		0.0										
2008	03	18	39	28		T		T										
2008	03	19	41	33		0.49		T										
2008	03	20	45	36		0.27		T										
2008	03	21	40	30		0.00		0.0										
2008	03	22	47	30		0.00		0.0										
2008	03	23	45	29		0.00		0.0										
2008	03	24	44	28		0.00		0.0										
2008	03	25	38	28		T		T										
2008	03	26	58	38		T		0.0										
2008	03	27	55	37		T		0.0										
2008	03	28	43	35		0.28		T										
2008	03	29	36	27		T		T										
2008	03	30	41	26		0.00		0.0										
2008	03	31	53	29		0.19		0.0										
		Summary	45	31		4.66		1.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	04	01	64	52		0.17		0.0										
2008	04	02	55	36		0.00		0.0										
2008	04	03	53	33		0.00		0.0										
2008	04	04	44	37		0.73		0.0										
2008	04	05	54	39		0.06		0.0										
2008	04	06	42	39		0.01		0.0										
2008	04	07	43	36		0.00		0.0										
2008	04	08	45	33		0.00		0.0										
2008	04	09	53	33		0.00		0.0										
2008	04	10	72	47		T		0.0										
2008	04	11	53	44		0.02		0.0										
2008	04	12	61	44		0.45		0.0										
2008	04	13	49	38		0.01		0.0										
2008	04	14	55	36		0.00		0.0										
2008	04	15	53	37		0.00		0.0										
2008	04	16	58	37		0.00		0.0										
2008	04	17	56	40		0.00		0.0										
2008	04	18	68	43		0.00		0.0										
2008	04	19	57	46		0.00		0.0										
2008	04	20	55	45		0.00		0.0										
2008	04	21	52	44		0.00		0.0										
2008	04	22	67	44		0.00		0.0										
2008	04	23	84	50		0.00		0.0										
2008	04	24	74	53		T		0.0										
2008	04	25	62	49		0.00		0.0										
2008	04	26	53	44		T		0.0										
2008	04	27	51	46		T		0.0										
2008	04	28	58	44		0.58		0.0										
2008	04	29	60	45		0.95		0.0										
2008	04	30	53	42		0.00		0.0										
		Summary	57	42		2.98		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	05	01	60	40		0.00		0.0										
2008	05	02	50	46		0.14		0.0										
2008	05	03	48	43		0.07		0.0										
2008	05	04	52	45		0.24		0.0										
2008	05	05	58	44		0.00		0.0										
2008	05	06	66	46		0.00		0.0										
2008	05	07	70	55		0.00		0.0										
2008	05	08	77	57		0.04		0.0										
2008	05	09	61	48		0.21		0.0										
2008	05	10	59	48		T		0.0										
2008	05	11	58	46		0.00		0.0										
2008	05	12	51	47		0.00		0.0										
2008	05	13	66	46		0.00		0.0										
2008	05	14	60	48		0.00		0.0										
2008	05	15	69	52		0.00		0.0										
2008	05	16	59	48		0.25		0.0										
2008	05	17	73	50		0.44		0.0										
2008	05	18	71	55		T		0.0										
2008	05	19	60	50		0.00		0.0										
2008	05	20	66	45		T		0.0										
2008	05	21	71	50		T		0.0										
2008	05	22	60	49		0.33		0.0										
2008	05	23	72	48		T		0.0										
2008	05	24	72	53		0.00		0.0										
2008	05	25	71	55		0.00		0.0										
2008	05	26	80	53		0.00		0.0										
2008	05	27	83	57		0.99		0.0										
2008	05	28	68	51		0.00		0.0										
2008	05	29	77	52		0.00		0.0										
2008	05	30	66	58		0.00		0.0										
2008	05	31	76	62		0.02		0.0										
		Summary	65	50		2.73		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	06	01	82	61		0.00		0.0										
2008	06	02	78	59		0.00		0.0										
2008	06	03	86	61		0.00		0.0										
2008	06	04	70	53		0.56		0.0										
2008	06	05	59	52		T		0.0										
2008	06	06	61	52		0.22		0.0										
2008	06	07	92	57		0.00		0.0										
2008	06	08	93	77		0.00		0.0										
2008	06	09	95	66		0.00		0.0										
2008	06	10	95	63		0.00		0.0										
2008	06	11	87	66		0.00		0.0										
2008	06	12	81	67		0.00		0.0										
2008	06	13	78	60		0.00		0.0										
2008	06	14	75	63		T		0.0										
2008	06	15	64	57		0.31		0.0										
2008	06	16	67	60		0.44		0.0										
2008	06	17	80	59		T		0.0										
2008	06	18	74	58		0.00		0.0										
2008	06	19	75	59		0.00		0.0										
2008	06	20	80	61		0.03		0.0										
2008	06	21	83	63		0.00		0.0										
2008	06	22	84	63		T		0.0										
2008	06	23	73	65		0.46		0.0										
2008	06	24	78	59		0.78		0.0										
2008	06	25	83	63		0.00		0.0										
2008	06	26	82	65		T		0.0										
2008	06	27	85	66		0.66		0.0										
2008	06	28	69	57		T		0.0										
2008	06	29	75	61		T		0.0										
2008	06	30	88	73		T		0.0										
		Summary	79	62		3.46		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	07	01	88	68		0.17		0.0										
2008	07	02	80	66		0.66		0.0										
2008	07	03	88	65		0.12		0.0										
2008	07	04	72	62		0.20		0.0										
2008	07	05	69	61		0.01		0.0										
2008	07	06	79	61		0.00		0.0										
2008	07	07	87	69		0.00		0.0										
2008	07	08	90	73		0.00		0.0										
2008	07	09	90	73		0.04		0.0										
2008	07	10	84	71		0.01		0.0										
2008	07	11	77	66		0.00		0.0										
2008	07	12	83	67		0.00		0.0										
2008	07	13	84	68		0.00		0.0										
2008	07	14	84	69		0.07		0.0										
2008	07	15	88	66		0.00		0.0										
2008	07	16	82	69		0.00		0.0										
2008	07	17	85	69		0.00		0.0										
2008	07	18	92	66		0.13		0.0										
2008	07	19	95	68		0.00		0.0										
2008	07	20	82	70		1.15		0.0										
2008	07	21	84	68		0.14		0.0										
2008	07	22	73	66		0.25		0.0										
2008	07	23	71	66		0.66		0.0										
2008	07	24	83	68		2.16		0.0										
2008	07	25	77	67		0.00		0.0										
2008	07	26	85	67		0.00		0.0										
2008	07	27	80	65		0.19		0.0										
2008	07	28	85	64		0.00		0.0										
2008	07	29	86	72		0.00		0.0										
2008	07	30	80	68		0.00		0.0										
2008	07	31	85	66		0.04		0.0										
		Summary	83	67		6.00		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	08	01	80	68		T		0.0										
2008	08	02	75	66		0.55		0.0										
2008	08	03	80	63		0.33		0.0										
2008	08	04	83	66		0.00		0.0										
2008	08	05	71	66		T		0.0										
2008	08	06	66	63		0.28		0.0										
2008	08	07	71	63		0.14		0.0										
2008	08	08	74	63		1.31		0.0										
2008	08	09	77	63		0.00		0.0										
2008	08	10	76	63		1.25		0.0										
2008	08	11	68	64		0.06		0.0										
2008	08	12	75	61		0.10		0.0										
2008	08	13	80	63		0.00		0.0										
2008	08	14	75	64		0.09		0.0										
2008	08	15	75	65		0.35		0.0										
2008	08	16	81	64		T		0.0										
2008	08	17	82	66		0.00		0.0										
2008	08	18	87	69		0.00		0.0										
2008	08	19	79	60		0.01		0.0										
2008	08	20	75	56		0.00		0.0										
2008	08	21	78	59		0.00		0.0										
2008	08	22	79	62		0.00		0.0										
2008	08	23	78	62		0.00		0.0										
2008	08	24	76	61		0.00		0.0										
2008	08	25	84	62		0.00		0.0										
2008	08	26	75	59		0.00		0.0										
2008	08	27	73	58		0.00		0.0										
2008	08	28	74	63		0.00		0.0										
2008	08	29	75	62		0.00		0.0										
2008	08	30	79	67		T		0.0										
2008	08	31	82	67		0.00		0.0										
		Summary	77	63		4.47		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	09	01	84	64		0.00		0.0										
2008	09	02	76	64		0.00		0.0										
2008	09	03	75	61		0.00		0.0										
2008	09	04	88	65		0.00		0.0										
2008	09	05	89	69		0.00		0.0										
2008	09	06	83	69		1.86		0.0										
2008	09	07	80	67		0.38		0.0										
2008	09	08	79	63		0.00		0.0										
2008	09	09	77	64		0.28		0.0										
2008	09	10	70	57		0.00		0.0										
2008	09	11	68	53		0.00		0.0										
2008	09	12	68	57		0.11		0.0										
2008	09	13	73	64		0.00		0.0										
2008	09	14	73	66		0.35		0.0										
2008	09	15	82	64		0.00		0.0										
2008	09	16	65	58		0.00		0.0										
2008	09	17	67	56		0.00		0.0										
2008	09	18	68	53		0.00		0.0										
2008	09	19	58	48		0.00		0.0										
2008	09	20	62	48		0.00		0.0										
2008	09	21	75	52		0.31		0.0										
2008	09	22	61	52		0.00		0.0										
2008	09	23	62	50		0.00		0.0										
2008	09	24	63	50		0.00		0.0										
2008	09	25	65	51		0.00		0.0										
2008	09	26	63	60		1.65		0.0										
2008	09	27	68	61		0.90		0.0										
2008	09	28	71	62		0.53		0.0										
2008	09	29	69	63		0.08		0.0										
2008	09	30	64	59		T		0.0										
		Summary	72	59		6.45		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	10	01	68	60		0.40		0.0										
2008	10	02	64	49		0.07		0.0										
2008	10	03	64	48		T		0.0										
2008	10	04	63	46		0.00		0.0										
2008	10	05	56	45		T		0.0										
2008	10	06	60	45		0.00		0.0										
2008	10	07	66	44		0.00		0.0										
2008	10	08	71	46		0.00		0.0										
2008	10	09	74	58		0.01		0.0										
2008	10	10	71	57		0.00		0.0										
2008	10	11	70	51		0.00		0.0										
2008	10	12	65	50		0.00		0.0										
2008	10	13	62	52		0.00		0.0										
2008	10	14	67	53		0.00		0.0										
2008	10	15	63	53		0.00		0.0										
2008	10	16	70	55		T		0.0										
2008	10	17	60	46		0.00		0.0										
2008	10	18	53	41		0.00		0.0										
2008	10	19	50	40		0.00		0.0										
2008	10	20	56	37		0.00		0.0										
2008	10	21	59	44		0.01		0.0										
2008	10	22	48	41		0.03		0.0										
2008	10	23	48	35		0.00		0.0										
2008	10	24	63	35		0.00		0.0										
2008	10	25	66	45		0.16		0.0										
2008	10	26	66	48		0.33		0.0										
2008	10	27	61	46		0.00		0.0										
2008	10	28	54	40		0.40		0.0										
2008	10	29	46	36		0.00		0.0										
2008	10	30	46	34		0.00		0.0										
2008	10	31	63	33		0.00		0.0										
		Summary	61	46		1.41		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	11	01	61	40		0.00		0.0										
2008	11	02	44	34		0.00		0.0										
2008	11	03	52	32		0.00		0.0										
2008	11	04	66	45		0.00		0.0										
2008	11	05	59	49		0.04		0.0										
2008	11	06	58	54		0.80		0.0										
2008	11	07	59	54		0.01		0.0										
2008	11	08	62	53		0.06		0.0										
2008	11	09	59	48		0.01		0.0										
2008	11	10	53	40		0.00		0.0										
2008	11	11	50	37		0.00		0.0										
2008	11	12	48	39		0.00		0.0										
2008	11	13	50	38		0.05		0.0										
2008	11	14	59	49		0.06		0.0										
2008	11	15	70	55		0.47		0.0										
2008	11	16	66	42		0.37		0.0										
2008	11	17	48	36		0.00		0.0										
2008	11	18	40	27		0.00		0.0										
2008	11	19	33	23		0.00		0.0										
2008	11	20	35	22		0.00		0.0										
2008	11	21	35	23		T		0.0										
2008	11	22	29	22		0.00		0.0										
2008	11	23	33	22		0.00		0.0										
2008	11	24	44	28		0.00		0.0										
2008	11	25	51	39		1.77		0.0										
2008	11	26	45	33		0.00		0.0										
2008	11	27	45	34		0.00		0.0										
2008	11	28	46	32		0.04		T										
2008	11	29	45	34		0.00		0.0										
2008	11	30	45	29		0.89		T										
		Summary	50	37		4.57		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2008	12	01	60	44		0.11		0.0										
2008	12	02	48	38		0.00		0.0										
2008	12	03	46	34		0.00		0.0										
2008	12	04	55	35		T		0.0										
2008	12	05	42	31		0.00		0.0										
2008	12	06	37	27		0.00		0.0										
2008	12	07	37	25		0.07		1.5										
2008	12	08	25	14		0.00		0.0										
2008	12	09	56	17		0.05		T										
2008	12	10	63	40		0.40		0.0										
2008	12	11	40	36		1.15		0.0										
2008	12	12	48	32		2.29		0.0										
2008	12	13	32	23		0.00		0.0										
2008	12	14	43	22		0.00		0.0										
2008	12	15	63	43		0.00		0.0										
2008	12	16	61	29		0.02		T										
2008	12	17	42	28		0.47		1.0										
2008	12	18	40	32		0.00		0.0										
2008	12	19	34	15		0.88		8.8										
2008	12	20	20	13		0.18		3.7										
2008	12	21	36	19		0.51		3.8										
2008	12	22	27	17		0.00		0.0										
2008	12	23	28	15		0.00		0.0										
2008	12	24	52	27		0.14		0.0										
2008	12	25	55	31		0.08		0.0										
2008	12	26	36	25		0.00		0.0										
2008	12	27	49	36		0.34		0.0										
2008	12	28	62	44		0.00		0.0										
2008	12	29	44	33		0.00		0.0										
2008	12	30	40	28		0.01		T										
2008	12	31	28	9		0.40		6.5										
		Summary	44	28		7.10		25.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	01	01	19	6		0.00		0.0										
2009	01	02	34	14		0.00		0.0										
2009	01	03	34	24		0.01		0.2										
2009	01	04	38	22		0.00		0.0										
2009	01	05	39	27		0.06		0.0										
2009	01	06	35	26		0.00		0.0										
2009	01	07	39	28		1.17		1.1										
2009	01	08	40	25		0.07		0.1										
2009	01	09	28	21		0.00		0.0										
2009	01	10	26	17		0.05		0.7										
2009	01	11	33	22		0.35		4.8										
2009	01	12	29	19		T		0.1										
2009	01	13	36	19		0.02		T										
2009	01	14	37	14		0.00		0.0										
2009	01	15	17	10		0.00		0.0										
2009	01	16	18	6		0.00		0.0										
2009	01	17	19	8		T		T										
2009	01	18	32	19		0.37		9.3										
2009	01	19	33	22		0.17		3.1										
2009	01	20	32	21		T		T										
2009	01	21	25	15		T		T										
2009	01	22	33	17		0.00		0.0										
2009	01	23	39	25		0.00		0.0										
2009	01	24	40	15		0.00		0.0										
2009	01	25	24	8		0.00		0.0										
2009	01	26	24	15		0.00		0.0										
2009	01	27	28	20		0.00		0.0										
2009	01	28	37	23		1.08		4.3										
2009	01	29	36	26		0.00		0.0										
2009	01	30	36	19		0.00		0.0										
2009	01	31	28	19		0.00		0.0										
		Summary	31	18		3.35		23.7										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	02	01	45	19		0.00		0.0										
2009	02	02	48	30		0.00		0.0										
2009	02	03	35	24		0.35		4.2										
2009	02	04	26	13		0.03		0.9										
2009	02	05	20	8		0.00		0.0										
2009	02	06	27	11		0.00		0.0										
2009	02	07	42	16		0.00		0.0										
2009	02	08	51	35		0.00		0.0										
2009	02	09	39	25		0.00		0.0										
2009	02	10	37	25		0.00		0.0										
2009	02	11	58	33		0.00		0.0										
2009	02	12	53	39		0.16		0.0										
2009	02	13	42	29		T		0.0										
2009	02	14	42	25		0.00		0.0										
2009	02	15	41	27		0.00		0.0										
2009	02	16	35	25		0.00		0.0										
2009	02	17	37	24		0.00		0.0										
2009	02	18	42	24		0.11		0.6										
2009	02	19	48	28		0.30		0.3										
2009	02	20	30	23		0.02		0.2										
2009	02	21	39	27		0.00		0.0										
2009	02	22	42	29		0.78		T										
2009	02	23	34	23		T		T										
2009	02	24	37	20		0.00		0.0										
2009	02	25	36	22		0.00		0.0										
2009	02	26	48	28		0.00		0.0										
2009	02	27	60	34		0.17		0.0										
2009	02	28	52	30		0.02		0.0										
		Summary	41	25		1.94		6.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	03	01	30	22		0.06		1.6										
2009	03	02	25	19		0.69		6.9										
2009	03	03	26	15		T		T										
2009	03	04	32	14		0.00		0.0										
2009	03	05	39	21		0.00		0.0										
2009	03	06	50	33		0.00		0.0										
2009	03	07	61	43		0.02		0.0										
2009	03	08	59	41		0.00		0.0										
2009	03	09	41	32		0.54		2.2										
2009	03	10	41	31		0.01		0.0										
2009	03	11	53	36		0.16		0.0										
2009	03	12	42	29		0.00		0.0										
2009	03	13	33	23		0.00		0.0										
2009	03	14	52	28		0.00		0.0										
2009	03	15	52	34		0.00		0.0										
2009	03	16	39	32		0.00		0.0										
2009	03	17	42	30		0.00		0.0										
2009	03	18	61	34		0.00		0.0										
2009	03	19	49	40		0.05		0.0										
2009	03	20	40	30		0.00		0.0										
2009	03	21	39	27		0.00		0.0										
2009	03	22	52	31		0.00		0.0										
2009	03	23	34	23		0.00		0.0										
2009	03	24	46	23		0.00		0.0										
2009	03	25	46	33		0.00		0.0										
2009	03	26	53	31		0.21		0.0										
2009	03	27	49	38		0.07		0.0										
2009	03	28	47	39		0.00		0.0										
2009	03	29	45	39		0.52		0.0										
2009	03	30	46	41		0.18		0.0										
2009	03	31	49	37		0.00		0.0										
		Summary	44	31		2.51		10.7										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	04	01	45	37		0.09		0.0										
2009	04	02	51	40		0.02		0.0										
2009	04	03	56	41		0.72		0.0										
2009	04	04	53	41		T		0.0										
2009	04	05	59	41		0.00		0.0										
2009	04	06	51	39		1.17		0.0										
2009	04	07	53	37		T		0.0										
2009	04	08	47	35		0.00		0.0										
2009	04	09	61	37		0.00		0.0										
2009	04	10	66	40		0.15		0.0										
2009	04	11	46	38		0.49		0.0										
2009	04	12	44	34		0.00		0.0										
2009	04	13	54	34		0.00		0.0										
2009	04	14	52	39		0.00		0.0										
2009	04	15	50	38		0.00		0.0										
2009	04	16	49	35		0.00		0.0										
2009	04	17	70	41		0.00		0.0										
2009	04	18	65	46		0.07		0.0										
2009	04	19	51	41		0.04		0.0										
2009	04	20	48	38		0.09		0.0										
2009	04	21	58	43		1.13		0.0										
2009	04	22	62	47		0.09		0.0										
2009	04	23	57	45		0.07		0.0										
2009	04	24	70	46		0.00		0.0										
2009	04	25	83	50		0.00		0.0										
2009	04	26	87	52		0.00		0.0										
2009	04	27	64	50		0.00		0.0										
2009	04	28	93	59		T		0.0										
2009	04	29	59	48		T		0.0										
2009	04	30	70	46		T		0.0										
		Summary	59	42		4.13		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	05	01	68	55		0.01		0.0										
2009	05	02	70	58		T		0.0										
2009	05	03	62	50		T		0.0										
2009	05	04	64	52		0.01		0.0										
2009	05	05	54	47		0.57		0.0										
2009	05	06	61	45		0.29		0.0										
2009	05	07	71	48		0.46		0.0										
2009	05	08	76	56		T		0.0										
2009	05	09	72	56		0.19		0.0										
2009	05	10	68	52		0.00		0.0										
2009	05	11	59	47		0.00		0.0										
2009	05	12	59	47		0.00		0.0										
2009	05	13	69	49		0.00		0.0										
2009	05	14	64	49		0.06		0.0										
2009	05	15	70	57		0.00		0.0										
2009	05	16	66	52		T		0.0										
2009	05	17	65	53		0.13		0.0										
2009	05	18	53	46		T		0.0										
2009	05	19	65	46		0.00		0.0										
2009	05	20	80	52		0.00		0.0										
2009	05	21	92	59		0.00		0.0										
2009	05	22	89	59		0.00		0.0										
2009	05	23	69	51		T		0.0										
2009	05	24	81	51		0.51		0.0										
2009	05	25	78	55		0.00		0.0										
2009	05	26	55	49		0.00		0.0										
2009	05	27	52	46		0.16		0.0										
2009	05	28	51	48		T		0.0										
2009	05	29	59	50		0.13		0.0										
2009	05	30	78	55		0.14		0.0										
2009	05	31	80	51		0.03		0.0										
		Summary	68	51		2.69		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	06	01	71	48		0.00		0.0										
2009	06	02	79	56		0.00		0.0										
2009	06	03	71	58		0.00		0.0										
2009	06	04	71	58		0.00		0.0										
2009	06	05	64	54		0.01		0.0										
2009	06	06	68	54		T		0.0										
2009	06	07	83	60		T		0.0										
2009	06	08	67	61		0.00		0.0										
2009	06	09	62	53		0.10		0.0										
2009	06	10	60	54		T		0.0										
2009	06	11	58	55		0.20		0.0										
2009	06	12	74	54		0.56		0.0										
2009	06	13	69	61		T		0.0										
2009	06	14	63	57		0.20		0.0										
2009	06	15	62	56		0.00		0.0										
2009	06	16	62	54		T		0.0										
2009	06	17	75	53		0.00		0.0										
2009	06	18	68	56		0.43		0.0										
2009	06	19	72	62		0.50		0.0										
2009	06	20	75	61		0.00		0.0										
2009	06	21	64	60		0.04		0.0										
2009	06	22	64	61		0.39		0.0										
2009	06	23	67	58		0.02		0.0										
2009	06	24	64	56		0.14		0.0										
2009	06	25	74	60		0.05		0.0										
2009	06	26	84	66		0.03		0.0										
2009	06	27	77	59		T		0.0										
2009	06	28	68	59		0.03		0.0										
2009	06	29	75	61		0.45		0.0										
2009	06	30	65	59		0.07		0.0										
		Summary	69	57		3.22		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	07	01	63	58		0.61		0.0										
2009	07	02	65	58		0.85		0.0										
2009	07	03	75	59		0.00		0.0										
2009	07	04	80	65		0.00		0.0										
2009	07	05	81	61		0.00		0.0										
2009	07	06	75	61		0.00		0.0										
2009	07	07	66	61		0.69		0.0										
2009	07	08	66	59		0.02		0.0										
2009	07	09	65	58		0.00		0.0										
2009	07	10	73	58		0.00		0.0										
2009	07	11	79	59		0.36		0.0										
2009	07	12	82	63		0.28		0.0										
2009	07	13	78	62		0.00		0.0										
2009	07	14	76	60		0.00		0.0										
2009	07	15	82	62		0.00		0.0										
2009	07	16	81	65		T		0.0										
2009	07	17	85	68		T		0.0										
2009	07	18	85	67		0.24		0.0										
2009	07	19	83	69		0.00		0.0										
2009	07	20	76	64		0.00		0.0										
2009	07	21	67	63		0.52		0.0										
2009	07	22	78	63		T		0.0										
2009	07	23	72	62		0.43		0.0										
2009	07	24	73	62		1.93		0.0										
2009	07	25	85	63		0.00		0.0										
2009	07	26	86	70		0.02		0.0										
2009	07	27	87	72		T		0.0										
2009	07	28	86	70		0.00		0.0										
2009	07	29	83	71		T		0.0										
2009	07	30	86	73		0.51		0.0										
2009	07	31	81	67		0.44		0.0										
Summary			77	64		6.90		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	08	01	79	68		0.00		0.0										
2009	08	02	78	66		T		0.0										
2009	08	03	82	68		0.00		0.0										
2009	08	04	83	68		0.00		0.0										
2009	08	05	89	72		0.00		0.0										
2009	08	06	77	66		0.00		0.0										
2009	08	07	82	65		0.00		0.0										
2009	08	08	74	62		0.00		0.0										
2009	08	09	76	59		T		0.0										
2009	08	10	89	69		0.01		0.0										
2009	08	11	85	66		0.05		0.0										
2009	08	12	70	66		0.00		0.0										
2009	08	13	70	63		0.09		0.0										
2009	08	14	80	60		0.00		0.0										
2009	08	15	87	66		0.00		0.0										
2009	08	16	87	71		0.00		0.0										
2009	08	17	94	72		0.00		0.0										
2009	08	18	95	72		0.00		0.0										
2009	08	19	91	74		0.00		0.0										
2009	08	20	80	71		0.28		0.0										
2009	08	21	90	72		0.00		0.0										
2009	08	22	87	72		0.17		0.0										
2009	08	23	87	73		0.13		0.0										
2009	08	24	78	68		0.77		0.0										
2009	08	25	77	68		0.00		0.0										
2009	08	26	86	69		0.00		0.0										
2009	08	27	74	61		0.00		0.0										
2009	08	28	70	59		0.09		0.0										
2009	08	29	66	56		1.65		0.0										
2009	08	30	72	56		0.00		0.0										
2009	08	31	71	60		0.00		0.0										
Summary			81	66		3.24		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	09	01	69	55		0.00		0.0										
2009	09	02	73	57		0.00		0.0										
2009	09	03	75	58		0.00		0.0										
2009	09	04	74	59		0.00		0.0										
2009	09	05	76	64		0.00		0.0										
2009	09	06	65	57		0.00		0.0										
2009	09	07	67	54		0.00		0.0										
2009	09	08	73	60		0.00		0.0										
2009	09	09	70	57		0.00		0.0										
2009	09	10	66	55		0.00		0.0										
2009	09	11	64	56		0.20		0.0										
2009	09	12	65	61		2.11		0.0										
2009	09	13	80	61		0.00		0.0										
2009	09	14	76	60		0.00		0.0										
2009	09	15	77	61		0.00		0.0										
2009	09	16	63	57		0.00		0.0										
2009	09	17	61	53		0.00		0.0										
2009	09	18	74	51		0.00		0.0										
2009	09	19	67	50		0.00		0.0										
2009	09	20	73	49		0.00		0.0										
2009	09	21	70	51		0.00		0.0										
2009	09	22	76	56		0.00		0.0										
2009	09	23	81	65		0.00		0.0										
2009	09	24	80	60		0.00		0.0										
2009	09	25	66	51		0.00		0.0										
2009	09	26	60	46		0.00		0.0										
2009	09	27	67	53		0.27		0.0										
2009	09	28	75	58		0.40		0.0										
2009	09	29	69	57		0.11		0.0										
2009	09	30	61	48		0.00		0.0										
		Summary	70	56		3.09		0.0										

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	10	01	57	45		0.00		0.0										
2009	10	02	61	45		T		0.0										
2009	10	03	63	54		1.18		0.0										
2009	10	04	69	54		0.00		0.0										
2009	10	05	67	54		0.00		0.0										
2009	10	06	67	50		0.00		0.0										
2009	10	07	69	54		0.46		0.0										
2009	10	08	63	50		0.00		0.0										
2009	10	09	61	50		0.09		0.0										
2009	10	10	65	47		0.27		0.0										
2009	10	11	61	41		0.00		0.0										
2009	10	12	54	42		0.00		0.0										
2009	10	13	53	40		0.31		0.0										
2009	10	14	52	38		0.00		0.0										
2009	10	15	43	36		0.02		0.0										
2009	10	16	45	36		0.09		0.0										
2009	10	17	49	36		T		0.0										
2009	10	18	49	34		0.93		0.1										
2009	10	19	54	37		T		0.0										
2009	10	20	65	37		0.00		0.0										
2009	10	21	68	52		0.00		0.0										
2009	10	22	67	49		0.00		0.0										
2009	10	23	57	40		T		0.0										
2009	10	24	69	46		1.10		0.0										
2009	10	25	65	49		0.03		0.0										
2009	10	26	57	45		0.00		0.0										
2009	10	27	52	43		T		0.0										
2009	10	28	51	47		0.66		0.0										
2009	10	29	49	42		0.00		0.0										
2009	10	30	55	46		0.00		0.0										
2009	10	31	73	46		0.03		0.0										
		Summary	59	45		5.17		0.1										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	11	01	60	45		T		0.0										
2009	11	02	52	42		T		0.0										
2009	11	03	58	40		0.00		0.0										
2009	11	04	51	41		0.00		0.0										
2009	11	05	47	38		0.03		0.0										
2009	11	06	50	36		T		0.0										
2009	11	07	50	35		0.00		0.0										
2009	11	08	68	44		0.00		0.0										
2009	11	09	69	40		0.00		0.0										
2009	11	10	65	53		0.00		0.0										
2009	11	11	53	44		0.00		0.0										
2009	11	12	52	42		0.00		0.0										
2009	11	13	52	46		0.00		0.0										
2009	11	14	55	52		1.49		0.0										
2009	11	15	64	54		0.09		0.0										
2009	11	16	59	45		0.00		0.0										
2009	11	17	49	40		0.00		0.0										
2009	11	18	50	36		0.00		0.0										
2009	11	19	54	36		0.00		0.0										
2009	11	20	67	47		0.42		0.0										
2009	11	21	58	44		0.00		0.0										
2009	11	22	51	41		0.00		0.0										
2009	11	23	49	45		0.10		0.0										
2009	11	24	49	46		0.05		0.0										
2009	11	25	50	46		0.07		0.0										
2009	11	26	51	46		0.00		0.0										
2009	11	27	47	42		0.82		0.0										
2009	11	28	53	42		0.06		0.0										
2009	11	29	54	40		0.00		0.0										
2009	11	30	56	39		0.21		0.0										
		Summary	55	43		3.34		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2009	12	01	43	33		0.00		0.0										
2009	12	02	53	35		0.07		0.0										
2009	12	03	69	50		0.73		0.0										
2009	12	04	54	44		0.00		0.0										
2009	12	05	45	33		0.35		2.2										
2009	12	06	37	31		0.02		0.5										
2009	12	07	39	28		0.00		0.0										
2009	12	08	41	31		0.00		0.0										
2009	12	09	48	32		1.03		T										
2009	12	10	44	31		T		T										
2009	12	11	31	24		0.00		0.0										
2009	12	12	33	22		0.00		0.0										
2009	12	13	47	25		0.73		0.0										
2009	12	14	43	37		0.00		0.0										
2009	12	15	48	38		0.00		0.0										
2009	12	16	40	27		T		T										
2009	12	17	28	11		0.00		0.0										
2009	12	18	28	10		0.00		0.0										
2009	12	19	33	17		T		T										
2009	12	20	30	19		0.55		10.0										
2009	12	21	32	20		0.00		0.0										
2009	12	22	31	20		0.00		0.0										
2009	12	23	25	16		0.00		0.0										
2009	12	24	40	20		0.00		0.0										
2009	12	25	37	27		0.01		0.3										
2009	12	26	43	32		T		0.0										
2009	12	27	54	36		0.25		0.0										
2009	12	28	42	30		0.05		0.0										
2009	12	29	31	12		0.00		0.0										
2009	12	30	29	11		0.00		0.0										
2009	12	31	32	24		0.12		2.2										
		Summary	40	27		3.91		15.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	01	01	35	26		T		T										
2010	01	02	30	21		0.43		6.4										
2010	01	03	31	17		0.20		3.7										
2010	01	04	35	26		T		T										
2010	01	05	34	27		0.00		0.0										
2010	01	06	34	24		T		T										
2010	01	07	41	27		0.00		0.0										
2010	01	08	29	21		0.01		0.2										
2010	01	09	27	13		0.00		0.0										
2010	01	10	28	11		0.00		0.0										
2010	01	11	36	17		0.00		0.0										
2010	01	12	34	16		0.00		0.0										
2010	01	13	30	14		T		T										
2010	01	14	33	21		0.00		0.0										
2010	01	15	46	31		0.00		0.0										
2010	01	16	48	32		0.00		0.0										
2010	01	17	41	31		0.43		T										
2010	01	18	34	31		0.71		1.9										
2010	01	19	36	31		0.30		0.8										
2010	01	20	37	31		T		T										
2010	01	21	41	28		0.00		0.0										
2010	01	22	37	25		0.00		0.0										
2010	01	23	33	23		0.00		0.0										
2010	01	24	41	25		T		0.0										
2010	01	25	57	37		0.81		0.0										
2010	01	26	52	35		T		0.0										
2010	01	27	43	32		0.00		0.0										
2010	01	28	37	20		0.02		0.2										
2010	01	29	21	10		0.00		0.0										
2010	01	30	22	6		0.00		0.0										
2010	01	31	29	13		0.00		0.0										
		Summary	36	23		2.91		13.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	02	01	35	22		0.00		0.0										
2010	02	02	31	24		0.00		0.0										
2010	02	03	33	25		0.02		0.4										
2010	02	04	34	25		0.00		0.0										
2010	02	05	35	22		0.00		0.0										
2010	02	06	25	18		T		T										
2010	02	07	34	14		0.00		0.0										
2010	02	08	33	22		0.00		0.0										
2010	02	09	41	23		0.00		0.0										
2010	02	10	36	29		0.20		1.2										
2010	02	11	40	29		0.00		0.0										
2010	02	12	39	25		0.00		0.0										
2010	02	13	38	23		0.00		0.0										
2010	02	14	41	27		0.00		0.0										
2010	02	15	40	30		0.00		0.0										
2010	02	16	34	30		0.65		5.3										
2010	02	17	37	28		T		T										
2010	02	18	46	33		0.00		0.0										
2010	02	19	43	31		T		T										
2010	02	20	50	34		0.00		0.0										
2010	02	21	42	32		T		T										
2010	02	22	46	30		0.00		0.0										
2010	02	23	40	33		T		0.0										
2010	02	24	42	36		1.12		0.0										
2010	02	25	45	37		1.28		0.0										
2010	02	26	44	34		0.03		T										
2010	02	27	40	31		0.04		0.1										
2010	02	28	38	29		T		T										
		Summary	39	28		3.34		7.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	03	01	48	34		0.31		0.2										
2010	03	02	43	36		0.00		0.0										
2010	03	03	38	34		0.02		T										
2010	03	04	36	33		0.06		T										
2010	03	05	42	31		T		T										
2010	03	06	57	31		0.00		0.0										
2010	03	07	57	37		0.00		0.0										
2010	03	08	59	42		0.00		0.0										
2010	03	09	53	37		0.00		0.0										
2010	03	10	44	33		0.00		0.0										
2010	03	11	45	35		0.08		0.0										
2010	03	12	44	39		0.00		0.0										
2010	03	13	41	39		1.47		0.0										
2010	03	14	44	40		3.40		0.0										
2010	03	15	44	38		2.11		0.0										
2010	03	16	50	36		0.00		0.0										
2010	03	17	65	35		0.00		0.0										
2010	03	18	66	48		0.00		0.0										
2010	03	19	61	43		0.00		0.0										
2010	03	20	72	45		0.00		0.0										
2010	03	21	54	41		0.00		0.0										
2010	03	22	43	41		0.08		0.0										
2010	03	23	46	42		2.22		0.0										
2010	03	24	52	40		0.02		0.0										
2010	03	25	65	39		T		0.0										
2010	03	26	53	30		0.17		T										
2010	03	27	34	25		0.00		0.0										
2010	03	28	48	29		0.00		0.0										
2010	03	29	54	45		1.96		0.0										
2010	03	30	50	44		2.93		0.0										
2010	03	31	47	43		0.04		0.0										
		Summary	50	38		14.87		0.2										

Empty, or blank, cells indicate that a data observation was not reported.

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	04	01	55	44		0.00		0.0										
2010	04	02	55	41		0.00		0.0										
2010	04	03	76	46		0.00		0.0										
2010	04	04	77	50		0.00		0.0										
2010	04	05	72	49		0.00		0.0										
2010	04	06	67	47		T		0.0										
2010	04	07	90	45		0.00		0.0										
2010	04	08	60	46		0.00		0.0										
2010	04	09	58	43		0.88		0.0										
2010	04	10	58	41		0.00		0.0										
2010	04	11	70	48		0.00		0.0										
2010	04	12	61	44		0.00		0.0										
2010	04	13	50	43		0.00		0.0										
2010	04	14	66	40		0.00		0.0										
2010	04	15	60	43		0.00		0.0										
2010	04	16	44	37		0.39		0.0										
2010	04	17	43	39		0.15		0.0										
2010	04	18	51	40		0.08		0.0										
2010	04	19	61	40		0.00		0.0										
2010	04	20	69	48		0.00		0.0										
2010	04	21	69	47		0.00		0.0										
2010	04	22	68	48		0.15		0.0										
2010	04	23	61	49		0.01		0.0										
2010	04	24	63	48		0.00		0.0										
2010	04	25	62	50		0.00		0.0										
2010	04	26	53	47		0.03		0.0										
2010	04	27	50	39		0.06		0.0										
2010	04	28	47	35		0.03		0.0										
2010	04	29	62	44		0.00		0.0										
2010	04	30	76	46		0.00		0.0										
		Summary	62	44		1.78		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	05	01	71	56		0.00		0.0										
2010	05	02	87	55		0.00		0.0										
2010	05	03	83	67		0.02		0.0										
2010	05	04	82	59		0.02		0.0										
2010	05	05	78	57		0.00		0.0										
2010	05	06	78	57		T		0.0										
2010	05	07	73	52		0.00		0.0										
2010	05	08	61	49		1.20		0.0										
2010	05	09	55	42		0.00		0.0										
2010	05	10	59	40		0.00		0.0										
2010	05	11	54	40		0.00		0.0										
2010	05	12	53	47		T		0.0										
2010	05	13	68	45		0.00		0.0										
2010	05	14	68	51		0.47		0.0										
2010	05	15	71	56		0.00		0.0										
2010	05	16	74	54		0.00		0.0										
2010	05	17	73	53		0.00		0.0										
2010	05	18	62	48		0.88		0.0										
2010	05	19	57	48		0.20		0.0										
2010	05	20	84	53		0.00		0.0										
2010	05	21	69	54		0.00		0.0										
2010	05	22	74	53		0.00		0.0										
2010	05	23	64	54		0.00		0.0										
2010	05	24	81	56		0.00		0.0										
2010	05	25	85	63		0.00		0.0										
2010	05	26	94	58		0.06		0.0										
2010	05	27	70	56		0.05		0.0										
2010	05	28	69	57		0.00		0.0										
2010	05	29	79	57		T		0.0										
2010	05	30	82	65		0.00		0.0										
2010	05	31	74	60		0.00		0.0										
		Summary	72	54		2.90		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	06	01	85	61		0.43		0.0										
2010	06	02	73	60		0.00		0.0										
2010	06	03	84	60		0.70		0.0										
2010	06	04	76	59		0.00		0.0										
2010	06	05	85	64		0.71		0.0										
2010	06	06	82	58		0.71		0.0										
2010	06	07	74	56		T		0.0										
2010	06	08	72	57		T		0.0										
2010	06	09	71	55		0.04		0.0										
2010	06	10	59	53		0.10		0.0										
2010	06	11	66	55		T		0.0										
2010	06	12	70	59		0.18		0.0										
2010	06	13	66	58		0.02		0.0										
2010	06	14	72	58		T		0.0										
2010	06	15	70	59		0.00		0.0										
2010	06	16	78	58		0.02		0.0										
2010	06	17	74	61		T		0.0										
2010	06	18	88	63		0.00		0.0										
2010	06	19	84	66		0.00		0.0										
2010	06	20	90	67		0.16		0.0										
2010	06	21	85	68		0.00		0.0										
2010	06	22	76	66		0.00		0.0										
2010	06	23	87	66		0.06		0.0										
2010	06	24	94	68		0.05		0.0										
2010	06	25	79	68		0.00		0.0										
2010	06	26	86	68		T		0.0										
2010	06	27	76	65		T		0.0										
2010	06	28	94	65		0.00		0.0										
2010	06	29	91	71		0.00		0.0										
2010	06	30	78	63		0.00		0.0										
		Summary	79	62		3.18		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	07	01	76	61		0.00		0.0										
2010	07	02	76	60		0.00		0.0										
2010	07	03	87	61		0.00		0.0										
2010	07	04	95	73		0.00		0.0										
2010	07	05	89	77		0.00		0.0										
2010	07	06	100	75		0.00		0.0										
2010	07	07	83	73		0.00		0.0										
2010	07	08	88	71		0.00		0.0										
2010	07	09	91	73		T		0.0										
2010	07	10	88	70		1.65		0.0										
2010	07	11	83	69		0.01		0.0										
2010	07	12	88	69		0.25		0.0										
2010	07	13	86	72		0.04		0.0										
2010	07	14	79	67		0.11		0.0										
2010	07	15	75	65		T		0.0										
2010	07	16	91	66		0.02		0.0										
2010	07	17	93	74		0.00		0.0										
2010	07	18	91	76		T		0.0										
2010	07	19	87	68		T		0.0										
2010	07	20	80	69		0.00		0.0										
2010	07	21	88	68		0.05		0.0										
2010	07	22	86	68		0.00		0.0										
2010	07	23	82	65		0.49		0.0										
2010	07	24	80	67		0.00		0.0										
2010	07	25	90	70		T		0.0										
2010	07	26	85	67		0.00		0.0										
2010	07	27	92	68		0.00		0.0										
2010	07	28	91	70		0.00		0.0										
2010	07	29	90	70		0.04		0.0										
2010	07	30	77	65		0.00		0.0										
2010	07	31	72	61		0.00		0.0										
		Summary	86	69		2.66		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	08	01	77	61		0.00		0.0										
2010	08	02	80	65		T		0.0										
2010	08	03	87	68		0.00		0.0										
2010	08	04	92	74		0.00		0.0										
2010	08	05	90	75		0.99		0.0										
2010	08	06	87	66		0.00		0.0										
2010	08	07	81	62		0.00		0.0										
2010	08	08	87	63		0.00		0.0										
2010	08	09	93	72		0.00		0.0										
2010	08	10	84	65		0.07		0.0										
2010	08	11	76	65		0.00		0.0										
2010	08	12	75	63		0.00		0.0										
2010	08	13	73	63		0.00		0.0										
2010	08	14	77	60		0.00		0.0										
2010	08	15	82	61		0.00		0.0										
2010	08	16	80	64		0.21		0.0										
2010	08	17	92	73		0.00		0.0										
2010	08	18	81	68		0.00		0.0										
2010	08	19	82	65		T		0.0										
2010	08	20	86	67		0.00		0.0										
2010	08	21	73	62		0.00		0.0										
2010	08	22	70	65		0.24		0.0										
2010	08	23	65	62		0.70		0.0										
2010	08	24	63	61		0.78		0.0										
2010	08	25	65	61		2.76		0.0										
2010	08	26	83	64		0.00		0.0										
2010	08	27	79	61		0.00		0.0										
2010	08	28	82	61		0.00		0.0										
2010	08	29	94	66		0.00		0.0										
2010	08	30	92	71		0.00		0.0										
2010	08	31	96	75		0.00		0.0										
		Summary	81	65		5.75		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	09	01	94	77		0.00		0.0										
2010	09	02	95	73		0.00		0.0										
2010	09	03	82	70		0.34		0.0										
2010	09	04	83	66		0.02		0.0										
2010	09	05	75	59		0.00		0.0										
2010	09	06	77	58		T		0.0										
2010	09	07	86	65		T		0.0										
2010	09	08	84	64		0.28		0.0										
2010	09	09	74	61		T		0.0										
2010	09	10	70	61		0.00		0.0										
2010	09	11	69	58		0.00		0.0										
2010	09	12	65	56		0.00		0.0										
2010	09	13	67	58		0.10		0.0										
2010	09	14	75	56		0.05		0.0										
2010	09	15	70	56		0.00		0.0										
2010	09	16	71	53		0.14		0.0										
2010	09	17	71	56		0.15		0.0										
2010	09	18	65	55		0.00		0.0										
2010	09	19	73	56		0.00		0.0										
2010	09	20	72	56		0.00		0.0										
2010	09	21	72	51		0.00		0.0										
2010	09	22	87	62		T		0.0										
2010	09	23	76	61		0.00		0.0										
2010	09	24	84	60		0.00		0.0										
2010	09	25	88	67		0.00		0.0										
2010	09	26	69	58		0.00		0.0										
2010	09	27	61	58		0.04		0.0										
2010	09	28	78	60		0.68		0.0										
2010	09	29	83	67		0.00		0.0										
2010	09	30	81	64		T		0.0										
		Summary	77	61		1.80		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	10	01	84	58		0.35		0.0										
2010	10	02	67	51		T		0.0										
2010	10	03	59	47		0.00		0.0										
2010	10	04	59	52		0.51		0.0										
2010	10	05	58	54		0.09		0.0										
2010	10	06	59	52		1.29		0.0										
2010	10	07	66	50		T		0.0										
2010	10	08	73	52		0.00		0.0										
2010	10	09	64	48		0.00		0.0										
2010	10	10	66	46		0.00		0.0										
2010	10	11	69	54		0.00		0.0										
2010	10	12	62	49		0.05		0.0										
2010	10	13	60	45		0.00		0.0										
2010	10	14	60	46		0.26		0.0										
2010	10	15	58	44		1.18		0.0										
2010	10	16	58	44		0.00		0.0										
2010	10	17	66	46		0.00		0.0										
2010	10	18	60	48		0.00		0.0										
2010	10	19	59	43		0.00		0.0										
2010	10	20	62	45		0.00		0.0										
2010	10	21	60	45		0.02		0.0										
2010	10	22	51	41		0.00		0.0										
2010	10	23	59	40		0.00		0.0										
2010	10	24	52	43		0.01		0.0										
2010	10	25	65	50		0.01		0.0										
2010	10	26	73	61		T		0.0										
2010	10	27	72	64		0.13		0.0										
2010	10	28	78	56		0.00		0.0										
2010	10	29	58	44		T		0.0										
2010	10	30	57	40		0.00		0.0										
2010	10	31	58	37		T		0.0										
		Summary	63	48		3.90		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	11	01	51	35		0.00		0.0										
2010	11	02	49	37		0.00		0.0										
2010	11	03	51	32		0.00		0.0										
2010	11	04	52	39		0.78		0.0										
2010	11	05	62	47		0.38		0.0										
2010	11	06	50	42		0.00		0.0										
2010	11	07	45	37		0.14		0.0										
2010	11	08	50	36		0.43		T										
2010	11	09	53	46		0.06		0.0										
2010	11	10	48	42		0.07		0.0										
2010	11	11	50	39		0.00		0.0										
2010	11	12	56	39		0.00		0.0										
2010	11	13	61	41		0.00		0.0										
2010	11	14	52	41		0.00		0.0										
2010	11	15	52	47		0.00		0.0										
2010	11	16	53	49		0.04		0.0										
2010	11	17	64	49		0.90		0.0										
2010	11	18	54	41		0.00		0.0										
2010	11	19	45	35		0.00		0.0										
2010	11	20	54	34		0.00		0.0										
2010	11	21	39	32		0.00		0.0										
2010	11	22	56	37		T		0.0										
2010	11	23	62	51		0.00		0.0										
2010	11	24	51	34		0.00		0.0										
2010	11	25	41	31		0.00		0.0										
2010	11	26	47	34		0.16		0.0										
2010	11	27	43	32		0.00		0.0										
2010	11	28	45	28		0.00		0.0										
2010	11	29	46	35		0.00		0.0										
2010	11	30	49	34		T		0.0										
		Summary	51	39		2.96		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2010	12	01	56	46		0.38		0.0										
2010	12	02	51	36		T		0.0										
2010	12	03	41	34		0.00		0.0										
2010	12	04	43	32		0.00		0.0										
2010	12	05	36	29		0.00		0.0										
2010	12	06	35	27		0.00		0.0										
2010	12	07	37	28		0.00		0.0										
2010	12	08	34	25		0.00		0.0										
2010	12	09	29	19		0.00		0.0										
2010	12	10	28	14		0.00		0.0										
2010	12	11	45	28		T		T										
2010	12	12	53	30		1.15		0.0										
2010	12	13	57	37		0.17		0.0										
2010	12	14	37	21		T		T										
2010	12	15	23	18		T		T										
2010	12	16	34	20		T		T										
2010	12	17	36	21		0.00		0.0										
2010	12	18	38	24		0.00		0.0										
2010	12	19	37	25		T		T										
2010	12	20	33	26		0.19		2.6										
2010	12	21	41	27		0.01		0.1										
2010	12	22	39	32		0.03		0.4										
2010	12	23	40	31		0.07		0.7										
2010	12	24	38	27		0.00		0.0										
2010	12	25	31	23		0.00		0.0										
2010	12	26	32	23		0.91		9.9										
2010	12	27	30	19		0.70		8.3										
2010	12	28	35	18		0.00		0.0										
2010	12	29	38	29		0.00		0.0										
2010	12	30	43	29		0.00		0.0										
2010	12	31	50	28		0.00		0.0										
		Summary	39	27		3.61		22.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	01	01	56	35		0.00		0.0										
2011	01	02	51	38		0.15		0.0										
2011	01	03	38	29		0.00		0.0										
2011	01	04	39	25		0.00		0.0										
2011	01	05	39	28		0.00		0.0										
2011	01	06	32	22		0.00		0.0										
2011	01	07	35	23		0.02		0.3										
2011	01	08	33	27		0.16		1.9										
2011	01	09	35	25		0.13		1.6										
2011	01	10	35	23		0.00		0.0										
2011	01	11	31	21		0.00		0.0										
2011	01	12	35	28		1.40		14.6										
2011	01	13	31	21		0.00		0.0										
2011	01	14	25	18		0.00		0.0										
2011	01	15	33	15		T		T										
2011	01	16	35	21		0.00		0.0										
2011	01	17	21	14		0.00		0.0										
2011	01	18	40	18		0.95		1.9										
2011	01	19	39	32		0.19		T										
2011	01	20	32	26		T		T										
2011	01	21	30	22		0.73		7.3										
2011	01	22	26	17		0.00		0.0										
2011	01	23	24	5		0.00		0.0										
2011	01	24	13	-2		0.00		0.0										
2011	01	25	32	12		0.05		0.8										
2011	01	26	34	15		0.11		1.1										
2011	01	27	35	24		0.68		8.8										
2011	01	28	33	18		T		T										
2011	01	29	37	26		T		T										
2011	01	30	36	26		0.00		0.0										
2011	01	31	26	16		0.00		0.0										
Summary			34	22		4.57		38.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	02	01	22	16		0.45		6.8										
2011	02	02	36	20		0.86		3.6										
2011	02	03	28	19		T		T										
2011	02	04	33	16		0.00		0.0										
2011	02	05	40	22		0.27		0.0										
2011	02	06	42	35		T		0.0										
2011	02	07	42	29		0.02		T										
2011	02	08	39	17		0.27		0.5										
2011	02	09	31	13		0.00		0.0										
2011	02	10	28	19		0.00		0.0										
2011	02	11	29	13		0.00		0.0										
2011	02	12	39	21		0.00		0.0										
2011	02	13	37	23		0.00		0.0										
2011	02	14	52	35		T		0.0										
2011	02	15	35	21		0.00		0.0										
2011	02	16	41	19		0.00		0.0										
2011	02	17	60	36		0.00		0.0										
2011	02	18	60	37		0.05		0.0										
2011	02	19	49	17		T		T										
2011	02	20	36	17		0.00		0.0										
2011	02	21	30	14		0.08		1.3										
2011	02	22	38	13		0.00		0.0										
2011	02	23	41	22		0.00		0.0										
2011	02	24	44	24		T		0.0										
2011	02	25	39	30		1.63		1.0										
2011	02	26	37	28		T		T										
2011	02	27	32	22		0.31		5.3										
2011	02	28	46	25		0.63		0.0										
		Summary	39	22		4.57		18.5										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	03	01	40	29		0.00		0.0										
2011	03	02	48	23		0.02		0.2										
2011	03	03	29	12		0.00		0.0										
2011	03	04	38	19		0.00		0.0										
2011	03	05	55	29		T		0.0										
2011	03	06	61	46		0.07		0.0										
2011	03	07	57	29		0.41		0.0										
2011	03	08	39	25		0.00		0.0										
2011	03	09	37	29		0.00		0.0										
2011	03	10	40	36		0.02		0.0										
2011	03	11	51	40		0.52		0.0										
2011	03	12	52	37		0.00		0.0										
2011	03	13	49	37		T		0.0										
2011	03	14	42	32		T		T										
2011	03	15	43	29		0.00		0.0										
2011	03	16	44	34		0.54		0.0										
2011	03	17	63	37		0.00		0.0										
2011	03	18	70	46		0.00		0.0										
2011	03	19	48	35		T		0.0										
2011	03	20	40	30		0.00		0.0										
2011	03	21	41	34		0.16		0.3										
2011	03	22	44	35		0.00		0.0										
2011	03	23	40	32		0.00		0.0										
2011	03	24	39	31		0.01		0.2										
2011	03	25	45	30		0.00		0.0										
2011	03	26	41	26		0.00		0.0										
2011	03	27	45	27		0.00		0.0										
2011	03	28	48	28		0.00		0.0										
2011	03	29	49	32		0.00		0.0										
2011	03	30	55	34		0.00		0.0										
2011	03	31	44	33		0.35		0.6										
		Summary	46	31		2.10		1.3										

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Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	04	01	40	33		0.45		0.9										
2011	04	02	53	37		T		0.0										
2011	04	03	55	40		0.00		0.0										
2011	04	04	50	37		0.38		0.0										
2011	04	05	64	39		0.07		0.0										
2011	04	06	54	36		0.00		0.0										
2011	04	07	46	34		0.00		0.0										
2011	04	08	48	36		0.00		0.0										
2011	04	09	61	35		0.00		0.0										
2011	04	10	65	40		0.04		0.0										
2011	04	11	72	47		0.01		0.0										
2011	04	12	66	47		0.08		0.0										
2011	04	13	49	43		1.33		0.0										
2011	04	14	65	43		0.02		0.0										
2011	04	15	47	37		0.00		0.0										
2011	04	16	46	36		0.07		0.0										
2011	04	17	63	46		0.96		0.0										
2011	04	18	61	44		T		0.0										
2011	04	19	52	42		0.15		0.0										
2011	04	20	46	42		T		0.0										
2011	04	21	56	41		0.00		0.0										
2011	04	22	50	38		0.00		0.0										
2011	04	23	55	39		0.40		T										
2011	04	24	75	54		0.03		0.0										
2011	04	25	57	46		0.01		0.0										
2011	04	26	54	46		0.00		0.0										
2011	04	27	78	47		0.00		0.0										
2011	04	28	70	62		0.03		0.0										
2011	04	29	75	58		0.00		0.0										
2011	04	30	61	48		0.00		0.0										
		Summary	58	42		4.03		0.9										

Empty, or blank, cells indicate that a data observation was not reported.

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	05	01	55	46		0.00		0.0										
2011	05	02	62	44		0.00		0.0										
2011	05	03	72	54		0.00		0.0										
2011	05	04	67	48		0.37		0.0										
2011	05	05	60	47		0.01		0.0										
2011	05	06	72	46		0.00		0.0										
2011	05	07	70	51		0.36		0.0										
2011	05	08	57	49		0.00		0.0										
2011	05	09	68	52		T		0.0										
2011	05	10	57	50		T		0.0										
2011	05	11	65	49		0.01		0.0										
2011	05	12	60	51		0.00		0.0										
2011	05	13	59	46		0.00		0.0										
2011	05	14	59	45		0.01		0.0										
2011	05	15	57	50		1.07		0.0										
2011	05	16	50	48		0.38		0.0										
2011	05	17	51	48		0.18		0.0										
2011	05	18	53	50		0.05		0.0										
2011	05	19	61	51		0.50		0.0										
2011	05	20	65	51		0.01		0.0										
2011	05	21	62	49		T		0.0										
2011	05	22	53	48		0.00		0.0										
2011	05	23	65	51		0.11		0.0										
2011	05	24	82	64		0.17		0.0										
2011	05	25	74	61		0.00		0.0										
2011	05	26	81	57		0.00		0.0										
2011	05	27	87	65		0.00		0.0										
2011	05	28	75	60		0.00		0.0										
2011	05	29	85	67		0.00		0.0										
2011	05	30	87	64		0.00		0.0										
2011	05	31	74	64		0.00		0.0										
		Summary	66	52		3.23		0.0										

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*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	06	01	82	64		0.56		T										
2011	06	02	75	58		0.00		0.0										
2011	06	03	71	55		0.00		0.0										
2011	06	04	64	51		0.00		0.0										
2011	06	05	63	49		0.00		0.0										
2011	06	06	70	55		0.00		0.0										
2011	06	07	82	60		0.00		0.0										
2011	06	08	84	62		0.00		0.0										
2011	06	09	92	70		0.51		0.0										
2011	06	10	76	61		0.00		0.0										
2011	06	11	65	55		0.71		0.0										
2011	06	12	58	53		0.33		0.0										
2011	06	13	64	54		0.05		0.0										
2011	06	14	60	55		0.04		0.0										
2011	06	15	69	57		0.00		0.0										
2011	06	16	89	61		0.00		0.0										
2011	06	17	75	65		0.04		0.0										
2011	06	18	83	64		0.07		0.0										
2011	06	19	80	67		0.00		0.0										
2011	06	20	83	62		0.00		0.0										
2011	06	21	76	65		0.00		0.0										
2011	06	22	71	64		1.82		0.0										
2011	06	23	65	59		0.17		0.0										
2011	06	24	61	56		0.01		0.0										
2011	06	25	63	54		0.27		0.0										
2011	06	26	76	61		T		0.0										
2011	06	27	78	66		0.00		0.0										
2011	06	28	81	66		0.00		0.0										
2011	06	29	85	68		0.18		0.0										
2011	06	30	82	65		0.00		0.0										
		Summary	74	60		4.76		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	07	01	78	66		0.00		0.0										
2011	07	02	76	66		0.00		0.0										
2011	07	03	82	67		0.03		0.0										
2011	07	04	90	70		0.00		0.0										
2011	07	05	88	68		0.00		0.0										
2011	07	06	92	71		T		0.0										
2011	07	07	88	70		0.00		0.0										
2011	07	08	75	68		0.29		0.0										
2011	07	09	86	67		0.12		0.0										
2011	07	10	86	66		0.00		0.0										
2011	07	11	93	68		0.00		0.0										
2011	07	12	95	77		0.00		0.0										
2011	07	13	87	66		0.45		0.0										
2011	07	14	73	63		0.72		0.0										
2011	07	15	79	65		0.00		0.0										
2011	07	16	85	65		0.00		0.0										
2011	07	17	93	71		0.00		0.0										
2011	07	18	86	75		T		0.0										
2011	07	19	89	70		0.00		0.0										
2011	07	20	91	70		0.00		0.0										
2011	07	21	97	73		0.00		0.0										
2011	07	22	103	81		0.00		0.0										
2011	07	23	92	72		0.11		0.0										
2011	07	24	84	67		0.02		0.0										
2011	07	25	74	63		0.15		0.0										
2011	07	26	78	65		0.01		0.0										
2011	07	27	84	68		0.00		0.0										
2011	07	28	75	68		0.00		0.0										
2011	07	29	79	66		0.14		0.0										
2011	07	30	89	73		0.00		0.0										
2011	07	31	91	70		0.00		0.0										
Summary			86	69		2.04		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	08	01	93	72		0.00		0.0										
2011	08	02	92	66		0.60		0.0										
2011	08	03	74	65		0.00		0.0										
2011	08	04	76	67		0.00		0.0										
2011	08	05	75	67		0.00		0.0										
2011	08	06	88	70		T		0.0										
2011	08	07	77	71		1.06		0.0										
2011	08	08	80	70		0.29		0.0										
2011	08	09	76	67		1.21		0.0										
2011	08	10	78	66		0.73		0.0										
2011	08	11	82	64		0.00		0.0										
2011	08	12	83	65		0.00		0.0										
2011	08	13	82	66		0.00		0.0										
2011	08	14	77	68		0.02		0.0										
2011	08	15	69	63		1.43		0.0										
2011	08	16	74	62		0.01		0.0										
2011	08	17	84	65		0.00		0.0										
2011	08	18	88	68		0.00		0.0										
2011	08	19	88	72		0.03		0.0										
2011	08	20	84	72		0.00		0.0										
2011	08	21	86	69		T		0.0										
2011	08	22	80	68		0.59		0.0										
2011	08	23	79	63		0.00		0.0										
2011	08	24	81	64		0.00		0.0										
2011	08	25	87	68		0.06		0.0										
2011	08	26	84	70		0.03		0.0										
2011	08	27	79	70		0.77		0.0										
2011	08	28	76	67		0.91		0.0										
2011	08	29	80	62		0.00		0.0										
2011	08	30	77	62		0.00		0.0										
2011	08	31	81	63		0.00		0.0										
		Summary	81	67		7.74		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	09	01	71	62		0.00		0.0										
2011	09	02	68	60		0.00		0.0										
2011	09	03	86	60		0.00		0.0										
2011	09	04	85	68		0.00		0.0										
2011	09	05	87	69		0.00		0.0										
2011	09	06	74	60		0.68		0.0										
2011	09	07	63	60		0.30		0.0										
2011	09	08	64	58		1.17		0.0										
2011	09	09	81	58		0.00		0.0										
2011	09	10	71	59		0.00		0.0										
2011	09	11	70	56		0.00		0.0										
2011	09	12	82	62		0.00		0.0										
2011	09	13	85	64		0.00		0.0										
2011	09	14	86	68		0.08		0.0										
2011	09	15	83	55		0.03		0.0										
2011	09	16	65	50		0.00		0.0										
2011	09	17	62	48		0.00		0.0										
2011	09	18	66	51		0.00		0.0										
2011	09	19	65	51		0.00		0.0										
2011	09	20	67	55		0.13		0.0										
2011	09	21	75	59		0.00		0.0										
2011	09	22	73	65		0.05		0.0										
2011	09	23	73	65		0.47		0.0										
2011	09	24	80	65		0.43		0.0										
2011	09	25	78	68		0.00		0.0										
2011	09	26	76	66		0.00		0.0										
2011	09	27	73	64		0.00		0.0										
2011	09	28	70	63		0.00		0.0										
2011	09	29	72	62		0.94		0.0										
2011	09	30	77	58		0.12		0.0										
		Summary	74	60		4.40		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	10	01	71	57		0.34		0.0										
2011	10	02	65	58		T		0.0										
2011	10	03	68	56		0.07		0.0										
2011	10	04	68	56		1.12		0.0										
2011	10	05	69	51		T		0.0										
2011	10	06	66	48		0.00		0.0										
2011	10	07	62	46		0.00		0.0										
2011	10	08	82	55		0.00		0.0										
2011	10	09	87	65		0.00		0.0										
2011	10	10	85	64		0.00		0.0										
2011	10	11	66	58		0.00		0.0										
2011	10	12	62	57		0.08		0.0										
2011	10	13	63	59		0.93		0.0										
2011	10	14	67	59		0.58		0.0										
2011	10	15	68	56		T		0.0										
2011	10	16	66	54		T		0.0										
2011	10	17	66	56		T		0.0										
2011	10	18	68	55		0.00		0.0										
2011	10	19	59	54		1.17		0.0										
2011	10	20	69	54		0.47		0.0										
2011	10	21	64	53		0.00		0.0										
2011	10	22	63	50		0.00		0.0										
2011	10	23	58	46		0.00		0.0										
2011	10	24	63	43		T		0.0										
2011	10	25	62	50		0.01		0.0										
2011	10	26	50	48		0.02		0.0										
2011	10	27	49	34		1.02		T										
2011	10	28	49	35		0.00		0.0										
2011	10	29	49	34		0.85		0.4										
2011	10	30	48	34		0.11		0.6										
2011	10	31	52	38		0.00		0.0										
		Summary	64	51		6.77		1.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	11	01	54	40		0.00		0.0										
2011	11	02	54	39		0.00		0.0										
2011	11	03	63	42		0.00		0.0										
2011	11	04	53	38		0.00		0.0										
2011	11	05	49	36		0.00		0.0										
2011	11	06	59	36		0.00		0.0										
2011	11	07	65	42		0.00		0.0										
2011	11	08	69	51		0.00		0.0										
2011	11	09	67	47		0.00		0.0										
2011	11	10	60	52		1.05		0.0										
2011	11	11	58	41		T		0.0										
2011	11	12	53	37		0.00		0.0										
2011	11	13	63	42		0.00		0.0										
2011	11	14	68	54		T		0.0										
2011	11	15	67	56		T		0.0										
2011	11	16	59	51		0.78		0.0										
2011	11	17	56	39		0.13		T										
2011	11	18	45	36		0.00		0.0										
2011	11	19	53	36		0.00		0.0										
2011	11	20	66	49		0.00		0.0										
2011	11	21	59	36		0.00		0.0										
2011	11	22	46	34		0.03		0.0										
2011	11	23	48	34		1.46		0.0										
2011	11	24	46	31		0.00		0.0										
2011	11	25	61	36		0.00		0.0										
2011	11	26	63	45		0.00		0.0										
2011	11	27	55	38		0.00		0.0										
2011	11	28	67	53		0.00		0.0										
2011	11	29	66	52		0.06		0.0										
2011	11	30	64	44		0.70		0.0										
		Summary	59	42		4.21		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2011	12	01	49	38		0.00		0.0										
2011	12	02	50	35		0.00		0.0										
2011	12	03	45	34		0.00		0.0										
2011	12	04	53	35		0.00		0.0										
2011	12	05	63	44		0.00		0.0										
2011	12	06	61	49		0.09		0.0										
2011	12	07	59	45		1.60		0.0										
2011	12	08	46	37		0.89		0.0										
2011	12	09	52	35		T		0.0										
2011	12	10	47	31		0.00		0.0										
2011	12	11	38	28		0.00		0.0										
2011	12	12	49	31		0.00		0.0										
2011	12	13	47	29		0.00		0.0										
2011	12	14	43	37		0.00		0.0										
2011	12	15	54	38		0.05		0.0										
2011	12	16	54	41		0.02		0.0										
2011	12	17	41	28		0.00		0.0										
2011	12	18	28	20		T		T										
2011	12	19	45	18		0.00		0.0										
2011	12	20	45	32		T		0.0										
2011	12	21	58	32		0.09		0.0										
2011	12	22	57	45		0.41		0.0										
2011	12	23	47	31		0.58		0.0										
2011	12	24	31	22		0.00		0.0										
2011	12	25	42	19		0.03		T										
2011	12	26	43	30		0.00		0.0										
2011	12	27	56	29		0.18		0.0										
2011	12	28	57	28		0.02		0.0										
2011	12	29	33	23		0.00		0.0										
2011	12	30	44	27		0.00		0.0										
2011	12	31	40	34		0.01		0.0										
Summary			48	32		3.97		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	01	01	52	39		0.01		0.0										
2012	01	02	50	34		0.01		0.0										
2012	01	03	35	14		0.00		0.0										
2012	01	04	28	10		0.00		0.0										
2012	01	05	39	25		0.00		0.0										
2012	01	06	48	28		T		T										
2012	01	07	60	30		0.00		0.0										
2012	01	08	45	30		0.00		0.0										
2012	01	09	40	25		0.00		0.0										
2012	01	10	47	30		0.02		0.5										
2012	01	11	38	30		0.00		0.0										
2012	01	12	42	33		0.92		0.0										
2012	01	13	54	31		0.05		0.0										
2012	01	14	34	19		0.00		0.0										
2012	01	15	19	6		0.00		0.0										
2012	01	16	34	10		0.06		1.2										
2012	01	17	48	33		0.09		0.2										
2012	01	18	52	21		0.00		0.0										
2012	01	19	33	17		0.01		0.3										
2012	01	20	32	22		0.05		1.5										
2012	01	21	23	16		0.18		2.9										
2012	01	22	30	15		0.00		0.0										
2012	01	23	47	28		0.20		T										
2012	01	24	56	42		0.01		0.0										
2012	01	25	43	36		0.00		0.0										
2012	01	26	41	31		0.17		0.2										
2012	01	27	46	37		0.89		0.0										
2012	01	28	46	38		0.00		0.0										
2012	01	29	43	34		0.00		0.0										
2012	01	30	40	31		T		T										
2012	01	31	47	30		0.00		0.0										
		Summary	42	27		2.67		6.8										

Empty, or blank, cells indicate that a data observation was not reported.

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	02	01	59	35		T		0.0										
2012	02	02	45	31		T		T										
2012	02	03	39	25		0.00		0.0										
2012	02	04	43	28		0.00		0.0										
2012	02	05	36	22		0.00		0.0										
2012	02	06	50	28		0.00		0.0										
2012	02	07	46	30		0.00		0.0										
2012	02	08	38	22		0.00		0.0										
2012	02	09	47	30		0.00		0.0										
2012	02	10	50	30		T		0.0										
2012	02	11	39	30		0.07		T										
2012	02	12	30	16		0.00		0.0										
2012	02	13	41	17		T		T										
2012	02	14	44	28		0.00		0.0										
2012	02	15	43	34		T		0.0										
2012	02	16	45	35		0.04		0.0										
2012	02	17	53	38		0.01		0.0										
2012	02	18	47	34		0.00		0.0										
2012	02	19	46	31		0.00		0.0										
2012	02	20	41	28		0.00		0.0										
2012	02	21	44	28		T		0.0										
2012	02	22	57	36		0.00		0.0										
2012	02	23	55	41		0.05		0.0										
2012	02	24	42	36		0.54		T										
2012	02	25	45	33		T		T										
2012	02	26	41	27		0.00		0.0										
2012	02	27	52	26		0.00		0.0										
2012	02	28	48	34		0.00		0.0										
2012	02	29	36	31		0.29		0.9										
		Summary	45	30		1.00		0.9										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	03	01	37	25		0.58		0.4										
2012	03	02	35	23		0.00		0.0										
2012	03	03	47	34		0.38		0.1										
2012	03	04	42	34		0.00		0.0										
2012	03	05	38	25		0.00		0.0										
2012	03	06	39	20		0.00		0.0										
2012	03	07	62	32		0.00		0.0										
2012	03	08	68	50		0.00		0.0										
2012	03	09	61	35		T		T										
2012	03	10	40	31		T		0.1										
2012	03	11	58	30		0.00		0.0										
2012	03	12	71	42		0.00		0.0										
2012	03	13	71	49		0.07		0.0										
2012	03	14	57	40		0.00		0.0										
2012	03	15	42	37		T		0.0										
2012	03	16	46	37		0.07		0.0										
2012	03	17	49	40		0.00		0.0										
2012	03	18	74	41		0.00		0.0										
2012	03	19	74	45		0.00		0.0										
2012	03	20	67	44		0.00		0.0										
2012	03	21	78	56		0.00		0.0										
2012	03	22	83	56		0.00		0.0										
2012	03	23	76	58		0.00		0.0										
2012	03	24	59	47		T		0.0										
2012	03	25	48	42		0.01		0.0										
2012	03	26	50	32		T		0.0										
2012	03	27	49	27		0.00		0.0										
2012	03	28	50	39		0.06		0.0										
2012	03	29	46	40		0.01		0.0										
2012	03	30	51	36		0.00		0.0										
2012	03	31	43	36		0.03		0.0										
		Summary	55	38		1.21		0.6										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	04	01	51	34		0.19		0.0										
2012	04	02	53	39		0.05		0.0										
2012	04	03	59	36		0.00		0.0										
2012	04	04	64	43		T		0.0										
2012	04	05	52	40		0.00		0.0										
2012	04	06	53	37		0.00		0.0										
2012	04	07	52	38		0.00		0.0										
2012	04	08	50	41		T		0.0										
2012	04	09	58	43		0.00		0.0										
2012	04	10	63	43		0.00		0.0										
2012	04	11	54	44		0.00		0.0										
2012	04	12	56	43		0.32		0.0										
2012	04	13	65	41		0.00		0.0										
2012	04	14	71	49		0.00		0.0										
2012	04	15	77	54		T		0.0										
2012	04	16	87	59		T		0.0										
2012	04	17	84	57		0.00		0.0										
2012	04	18	62	49		0.00		0.0										
2012	04	19	66	47		0.00		0.0										
2012	04	20	77	49		0.00		0.0										
2012	04	21	78	54		0.01		0.0										
2012	04	22	62	44		1.04		0.0										
2012	04	23	63	44		1.48		0.0										
2012	04	24	58	46		0.00		0.0										
2012	04	25	62	43		T		0.0										
2012	04	26	63	43		T		0.0										
2012	04	27	57	40		T		0.0										
2012	04	28	60	37		0.00		0.0										
2012	04	29	59	39		0.00		0.0										
2012	04	30	54	41		0.00		0.0										
		Summary	62	44		3.09		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	05	01	50	45		0.60		0.0										
2012	05	02	52	45		T		0.0										
2012	05	03	50	46		0.04		0.0										
2012	05	04	56	49		0.01		0.0										
2012	05	05	58	46		0.09		0.0										
2012	05	06	54	46		0.00		0.0										
2012	05	07	59	48		0.00		0.0										
2012	05	08	58	50		0.16		0.0										
2012	05	09	63	56		0.26		0.0										
2012	05	10	67	50		0.85		0.0										
2012	05	11	64	47		0.00		0.0										
2012	05	12	80	50		0.00		0.0										
2012	05	13	80	59		0.00		0.0										
2012	05	14	64	53		0.09		0.0										
2012	05	15	73	56		0.50		0.0										
2012	05	16	73	60		0.06		0.0										
2012	05	17	70	54		0.00		0.0										
2012	05	18	65	49		0.00		0.0										
2012	05	19	66	51		0.00		0.0										
2012	05	20	71	55		0.00		0.0										
2012	05	21	59	54		0.02		0.0										
2012	05	22	63	56		0.58		0.0										
2012	05	23	71	59		T		0.0										
2012	05	24	71	60		0.00		0.0										
2012	05	25	74	58		0.00		0.0										
2012	05	26	86	66		0.00		0.0										
2012	05	27	72	64		0.00		0.0										
2012	05	28	69	60		0.00		0.0										
2012	05	29	67	59		0.17		0.0										
2012	05	30	75	61		T		0.0										
2012	05	31	83	63		0.00		0.0										
Summary			67	54		3.43		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	06	01	65	58		0.00		0.0										
2012	06	02	62	55		1.13		0.0										
2012	06	03	62	53		0.01		0.0										
2012	06	04	53	50		0.13		0.0										
2012	06	05	56	50		0.13		0.0										
2012	06	06	61	52		T		0.0										
2012	06	07	65	54		0.04		0.0										
2012	06	08	79	54		0.31		0.0										
2012	06	09	79	59		T		0.0										
2012	06	10	76	59		0.00		0.0										
2012	06	11	74	57		0.00		0.0										
2012	06	12	74	60		0.01		0.0										
2012	06	13	65	62		0.70		0.0										
2012	06	14	68	61		0.00		0.0										
2012	06	15	69	57		0.00		0.0										
2012	06	16	65	54		0.00		0.0										
2012	06	17	63	52		0.00		0.0										
2012	06	18	64	55		0.00		0.0										
2012	06	19	76	56		0.00		0.0										
2012	06	20	97	66		0.00		0.0										
2012	06	21	96	80		0.00		0.0										
2012	06	22	95	74		0.02		0.0										
2012	06	23	81	65		1.19		T										
2012	06	24	84	64		0.00		0.0										
2012	06	25	73	61		0.93		0.0										
2012	06	26	73	61		0.06		0.0										
2012	06	27	77	61		T		0.0										
2012	06	28	83	65		0.00		0.0										
2012	06	29	89	66		0.05		0.0										
2012	06	30	90	70		0.00		0.0										
		Summary	74	60		4.71		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	07	01	91	70		0.00		0.0										
2012	07	02	84	69		0.00		0.0										
2012	07	03	86	68		0.00		0.0										
2012	07	04	84	68		0.14		0.0										
2012	07	05	83	70		0.00		0.0										
2012	07	06	80	68		0.00		0.0										
2012	07	07	86	73		T		0.0										
2012	07	08	89	71		0.00		0.0										
2012	07	09	84	67		0.00		0.0										
2012	07	10	83	65		0.00		0.0										
2012	07	11	80	66		0.00		0.0										
2012	07	12	86	66		0.00		0.0										
2012	07	13	90	69		0.00		0.0										
2012	07	14	91	72		0.00		0.0										
2012	07	15	91	72		T		0.0										
2012	07	16	88	72		T		0.0										
2012	07	17	97	76		0.00		0.0										
2012	07	18	89	70		1.74		0.0										
2012	07	19	74	66		0.06		0.0										
2012	07	20	71	64		0.00		0.0										
2012	07	21	74	61		0.00		0.0										
2012	07	22	84	61		0.00		0.0										
2012	07	23	86	66		0.02		0.0										
2012	07	24	91	68		0.55		0.0										
2012	07	25	83	65		0.00		0.0										
2012	07	26	84	66		T		0.0										
2012	07	27	77	64		0.02		0.0										
2012	07	28	72	63		0.87		0.0										
2012	07	29	73	64		T		0.0										
2012	07	30	81	63		0.00		0.0										
2012	07	31	73	63		0.48		0.0										
		Summary	83	67		3.88		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	08	01	78	68		0.80		0.0										
2012	08	02	86	68		0.00		0.0										
2012	08	03	92	72		0.00		0.0										
2012	08	04	82	74		0.00		0.0										
2012	08	05	88	72		0.08		0.0										
2012	08	06	85	71		0.00		0.0										
2012	08	07	77	67		0.00		0.0										
2012	08	08	83	66		0.00		0.0										
2012	08	09	83	69		0.00		0.0										
2012	08	10	84	69		1.17		0.0										
2012	08	11	81	71		0.00		0.0										
2012	08	12	84	72		0.01		0.0										
2012	08	13	86	71		0.00		0.0										
2012	08	14	83	70		0.00		0.0										
2012	08	15	84	66		0.83		0.0										
2012	08	16	85	67		T		0.0										
2012	08	17	86	66		T		0.0										
2012	08	18	72	64		0.04		0.0										
2012	08	19	73	61		0.00		0.0										
2012	08	20	75	62		0.00		0.0										
2012	08	21	83	66		T		0.0										
2012	08	22	78	66		0.00		0.0										
2012	08	23	87	66		0.00		0.0										
2012	08	24	78	68		0.00		0.0										
2012	08	25	77	66		0.00		0.0										
2012	08	26	76	64		0.00		0.0										
2012	08	27	85	62		0.00		0.0										
2012	08	28	86	68		0.15		0.0										
2012	08	29	75	62		0.00		0.0										
2012	08	30	83	60		0.00		0.0										
2012	08	31	90	68		0.00		0.0										
		Summary	82	67		3.08		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	09	01	80	63		0.00		0.0										
2012	09	02	73	62		T		0.0										
2012	09	03	72	59		0.00		0.0										
2012	09	04	73	63		0.44		0.0										
2012	09	05	82	66		0.66		0.0										
2012	09	06	79	65		0.00		0.0										
2012	09	07	82	68		0.43		0.0										
2012	09	08	82	67		0.71		0.0										
2012	09	09	75	62		T		0.0										
2012	09	10	69	56		0.00		0.0										
2012	09	11	73	53		0.00		0.0										
2012	09	12	73	53		0.00		0.0										
2012	09	13	82	60		0.00		0.0										
2012	09	14	81	61		0.00		0.0										
2012	09	15	74	59		0.12		0.0										
2012	09	16	71	54		0.00		0.0										
2012	09	17	70	53		0.00		0.0										
2012	09	18	75	58		0.09		0.0										
2012	09	19	72	55		0.61		0.0										
2012	09	20	62	51		0.00		0.0										
2012	09	21	63	51		0.00		0.0										
2012	09	22	67	56		0.00		0.0										
2012	09	23	71	56		0.02		0.0										
2012	09	24	67	51		0.00		0.0										
2012	09	25	73	49		0.00		0.0										
2012	09	26	74	59		T		0.0										
2012	09	27	69	55		0.00		0.0										
2012	09	28	58	54		0.79		0.0										
2012	09	29	57	54		0.02		0.0										
2012	09	30	59	53		0.21		0.0										
		Summary	72	58		4.10		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	10	01	68	50		0.00		0.0										
2012	10	02	71	56		0.03		0.0										
2012	10	03	64	59		0.08		0.0										
2012	10	04	62	59		0.03		0.0										
2012	10	05	76	57		0.00		0.0										
2012	10	06	78	54		0.06		0.0										
2012	10	07	58	48		0.11		0.0										
2012	10	08	56	46		0.00		0.0										
2012	10	09	58	53		T		0.0										
2012	10	10	62	52		0.14		0.0										
2012	10	11	59	45		0.00		0.0										
2012	10	12	54	40		0.03		0.0										
2012	10	13	53	35		0.00		0.0										
2012	10	14	67	47		0.19		0.0										
2012	10	15	74	60		0.02		0.0										
2012	10	16	63	45		0.06		0.0										
2012	10	17	56	42		0.00		0.0										
2012	10	18	60	44		0.00		0.0										
2012	10	19	68	53		0.06		0.0										
2012	10	20	74	58		0.16		0.0										
2012	10	21	64	49		0.00		0.0										
2012	10	22	68	52		0.00		0.0										
2012	10	23	67	51		0.00		0.0										
2012	10	24	55	47		0.00		0.0										
2012	10	25	59	44		0.00		0.0										
2012	10	26	66	47		0.00		0.0										
2012	10	27	60	49		0.00		0.0										
2012	10	28	56	51		0.08		0.0										
2012	10	29	61	53		1.06		0.0										
2012	10	30	63	52		0.49		0.0										
2012	10	31	56	47		0.02		0.0										
		Summary	63	50		2.62		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	11	01	57	45		0.00		0.0										
2012	11	02	52	45		0.03		0.0										
2012	11	03	53	42		0.00		0.0										
2012	11	04	53	38		0.00		0.0										
2012	11	05	45	33		0.00		0.0										
2012	11	06	41	31		0.00		0.0										
2012	11	07	45	32		0.33		0.1										
2012	11	08	40	32		0.21		0.3										
2012	11	09	53	38		0.00		0.0										
2012	11	10	55	40		0.00		0.0										
2012	11	11	61	40		0.00		0.0										
2012	11	12	66	47		0.00		0.0										
2012	11	13	63	40		0.29		0.0										
2012	11	14	45	36		0.00		0.0										
2012	11	15	41	34		0.00		0.0										
2012	11	16	45	35		0.00		0.0										
2012	11	17	47	36		0.00		0.0										
2012	11	18	47	33		0.00		0.0										
2012	11	19	48	33		0.00		0.0										
2012	11	20	48	34		0.00		0.0										
2012	11	21	49	38		0.00		0.0										
2012	11	22	50	40		0.00		0.0										
2012	11	23	49	36		0.00		0.0										
2012	11	24	48	34		T		0.0										
2012	11	25	40	31		0.00		0.0										
2012	11	26	46	33		0.00		0.0										
2012	11	27	39	34		0.15		T										
2012	11	28	36	32		T		T										
2012	11	29	43	32		0.00		0.0										
2012	11	30	38	30		0.00		0.0										
		Summary	48	36		1.01		0.4										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2012	12	01	32	28		0.03		0.5										
2012	12	02	52	32		T		0.0										
2012	12	03	59	41		0.00		0.0										
2012	12	04	57	39		0.01		0.0										
2012	12	05	57	33		T		0.0										
2012	12	06	41	30		0.00		0.0										
2012	12	07	44	30		0.03		0.0										
2012	12	08	47	43		0.34		0.0										
2012	12	09	49	41		0.08		0.0										
2012	12	10	60	42		0.56		0.0										
2012	12	11	56	34		T		0.0										
2012	12	12	40	31		0.00		0.0										
2012	12	13	42	29		0.00		0.0										
2012	12	14	49	31		0.00		0.0										
2012	12	15	40	33		0.00		0.0										
2012	12	16	39	34		0.25		T										
2012	12	17	45	37		0.48		0.0										
2012	12	18	50	41		0.86		0.0										
2012	12	19	45	38		T		0.0										
2012	12	20	43	33		T		0.0										
2012	12	21	52	38		0.65		0.0										
2012	12	22	38	30		0.00		0.0										
2012	12	23	38	29		0.00		0.0										
2012	12	24	40	31		0.00		0.0										
2012	12	25	35	28		0.01		0.2										
2012	12	26	39	23		0.23		T										
2012	12	27	47	30		1.67		0.1										
2012	12	28	37	28		0.00		0.0										
2012	12	29	37	29		0.69		2.2										
2012	12	30	30	22		0.04		0.4										
2012	12	31	34	21		0.00		0.0										
		Summary	44	33		5.93		3.4										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	01	01	37	20		0.00		0.0										
2013	01	02	30	12		T		T										
2013	01	03	25	7		0.00		0.0										
2013	01	04	38	21		0.00		0.0										
2013	01	05	42	27		0.00		0.0										
2013	01	06	43	28		T		T										
2013	01	07	39	29		0.00		0.0										
2013	01	08	46	28		0.00		0.0										
2013	01	09	46	28		T		0.0										
2013	01	10	47	35		0.00		0.0										
2013	01	11	40	31		0.12		0.0										
2013	01	12	44	38		0.01		0.0										
2013	01	13	51	40		T		0.0										
2013	01	14	61	42		0.00		0.0										
2013	01	15	42	35		T		0.0										
2013	01	16	36	30		0.37		3.2										
2013	01	17	42	30		0.00		0.0										
2013	01	18	30	19		0.00		0.0										
2013	01	19	49	24		0.00		0.0										
2013	01	20	54	29		0.00		0.0										
2013	01	21	30	23		0.01		0.4										
2013	01	22	25	15		T		T										
2013	01	23	17	8		0.00		0.0										
2013	01	24	21	4		0.00		0.0										
2013	01	25	24	10		0.01		0.1										
2013	01	26	25	13		0.01		0.2										
2013	01	27	32	14		0.00		0.0										
2013	01	28	31	21		0.17		1.0										
2013	01	29	34	27		0.01		0.1										
2013	01	30	60	33		0.06		0.0										
2013	01	31	60	32		0.31		0.0										
Summary			39	24		1.08		5.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	02	01	34	23		0.00		0.0										
2013	02	02	30	19		0.00		0.0										
2013	02	03	27	23		0.03		0.6										
2013	02	04	31	22		0.00		0.0										
2013	02	05	27	22		0.03		0.6										
2013	02	06	40	26		0.05		0.7										
2013	02	07	30	18		0.00		0.0										
2013	02	08	34	20		0.85		10.1										
2013	02	09	20	15		1.00		14.8										
2013	02	10	36	15		0.00		0.0										
2013	02	11	45	20		0.20		T										
2013	02	12	44	36		0.00		0.0										
2013	02	13	42	30		0.00		0.0										
2013	02	14	42	32		T		T										
2013	02	15	47	30		0.00		0.0										
2013	02	16	38	32		0.01		0.1										
2013	02	17	32	18		0.20		5.1										
2013	02	18	33	16		0.00		0.0										
2013	02	19	45	26		0.45		0.0										
2013	02	20	43	27		0.01		0.0										
2013	02	21	33	25		0.00		0.0										
2013	02	22	38	26		0.00		0.0										
2013	02	23	38	32		0.23		T										
2013	02	24	38	29		0.82		1.8										
2013	02	25	41	28		0.01		0.2										
2013	02	26	41	29		0.00		0.0										
2013	02	27	40	38		1.37		0.0										
2013	02	28	44	33		0.00		0.0										
		Summary	37	25		5.26		34.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	03	01	41	34		0.00		0.0										
2013	03	02	42	34		0.00		0.0										
2013	03	03	43	33		T		T										
2013	03	04	41	31		T		T										
2013	03	05	43	32		T		0.0										
2013	03	06	41	35		0.05		T										
2013	03	07	37	30		0.46		2.6										
2013	03	08	42	28		0.94		10.5										
2013	03	09	38	31		0.00		0.0										
2013	03	10	37	28		0.00		0.0										
2013	03	11	50	35		0.00		0.0										
2013	03	12	53	39		0.29		0.0										
2013	03	13	51	39		T		0.0										
2013	03	14	39	23		0.00		0.0										
2013	03	15	41	21		0.00		0.0										
2013	03	16	40	30		0.00		0.0										
2013	03	17	38	25		0.00		0.0										
2013	03	18	33	21		0.12		0.9										
2013	03	19	36	28		1.35		6.3										
2013	03	20	39	26		0.00		0.0										
2013	03	21	35	30		0.02		0.3										
2013	03	22	40	29		0.00		0.0										
2013	03	23	44	30		0.00		0.0										
2013	03	24	48	33		0.00		0.0										
2013	03	25	44	33		T		T										
2013	03	26	50	34		0.05		T										
2013	03	27	55	36		0.00		0.0										
2013	03	28	48	38		T		0.0										
2013	03	29	56	40		0.01		0.0										
2013	03	30	54	40		0.00		0.0										
2013	03	31	59	34		0.03		0.0										
		Summary	44	32		3.32		20.6										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	04	01	62	35		0.12		0.0										
2013	04	02	42	31		T		T										
2013	04	03	47	31		0.00		0.0										
2013	04	04	56	32		0.00		0.0										
2013	04	05	57	38		0.00		0.0										
2013	04	06	47	33		0.00		0.0										
2013	04	07	54	32		0.00		0.0										
2013	04	08	63	46		0.00		0.0										
2013	04	09	73	45		0.06		0.0										
2013	04	10	54	45		0.19		0.0										
2013	04	11	49	42		0.04		0.0										
2013	04	12	43	38		0.35		0.0										
2013	04	13	51	36		0.02		0.0										
2013	04	14	55	42		T		0.0										
2013	04	15	49	38		0.00		0.0										
2013	04	16	64	39		T		0.0										
2013	04	17	66	47		T		0.0										
2013	04	18	63	45		0.00		0.0										
2013	04	19	75	53		0.05		0.0										
2013	04	20	65	44		0.38		0.0										
2013	04	21	50	37		0.00		0.0										
2013	04	22	49	36		0.00		0.0										
2013	04	23	43	41		0.13		0.0										
2013	04	24	69	43		T		0.0										
2013	04	25	66	48		0.03		0.0										
2013	04	26	52	44		0.00		0.0										
2013	04	27	56	42		0.00		0.0										
2013	04	28	63	44		0.00		0.0										
2013	04	29	68	48		0.00		0.0										
2013	04	30	61	47		0.00		0.0										
		Summary	57	41		1.37		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	05	01	60	45		0.00		0.0										
2013	05	02	70	47		T		0.0										
2013	05	03	53	44		0.00		0.0										
2013	05	04	52	44		0.00		0.0										
2013	05	05	53	40		0.00		0.0										
2013	05	06	55	43		0.00		0.0										
2013	05	07	72	47		0.00		0.0										
2013	05	08	66	53		0.37		0.0										
2013	05	09	63	53		0.61		0.0										
2013	05	10	69	56		0.06		0.0										
2013	05	11	72	59		0.02		0.0										
2013	05	12	73	51		0.04		0.0										
2013	05	13	60	46		0.00		0.0										
2013	05	14	60	44		T		0.0										
2013	05	15	67	44		T		0.0										
2013	05	16	82	53		0.00		0.0										
2013	05	17	70	54		0.00		0.0										
2013	05	18	67	51		0.00		0.0										
2013	05	19	63	50		0.17		0.0										
2013	05	20	82	56		0.04		0.0										
2013	05	21	66	52		0.01		0.0										
2013	05	22	60	51		0.05		0.0										
2013	05	23	77	53		0.05		0.0										
2013	05	24	70	51		0.57		0.0										
2013	05	25	54	42		0.34		0.0										
2013	05	26	60	41		0.05		0.0										
2013	05	27	73	47		0.00		0.0										
2013	05	28	64	51		0.00		0.0										
2013	05	29	70	57		0.84		0.0										
2013	05	30	88	65		0.00		0.0										
2013	05	31	94	72		0.00		0.0										
		Summary	67	50		3.22		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	06	01	92	70		0.00		0.0										
2013	06	02	88	68		0.00		0.0										
2013	06	03	77	62		0.71		0.0										
2013	06	04	73	55		0.00		0.0										
2013	06	05	72	57		0.00		0.0										
2013	06	06	69	57		0.02		0.0										
2013	06	07	58	55		3.07		0.0										
2013	06	08	79	55		0.54		0.0										
2013	06	09	80	61		0.00		0.0										
2013	06	10	69	58		0.88		0.0										
2013	06	11	64	56		1.38		0.0										
2013	06	12	71	56		0.07		0.0										
2013	06	13	67	53		0.72		0.0										
2013	06	14	74	53		1.02		0.0										
2013	06	15	80	62		0.00		0.0										
2013	06	16	77	61		T		0.0										
2013	06	17	87	63		0.43		0.0										
2013	06	18	71	59		0.63		0.0										
2013	06	19	71	58		0.00		0.0										
2013	06	20	77	58		0.00		0.0										
2013	06	21	84	61		0.00		0.0										
2013	06	22	85	65		0.00		0.0										
2013	06	23	91	66		T		0.0										
2013	06	24	95	70		0.33		0.0										
2013	06	25	92	69		T		0.0										
2013	06	26	84	64		0.04		0.0										
2013	06	27	66	61		0.03		0.0										
2013	06	28	81	62		0.45		0.0										
2013	06	29	83	70		0.07		0.0										
2013	06	30	84	69		0.11		0.0										
		Summary	78	61		10.50		0.0										

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Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	07	01	85	71		0.03		0.0										
2013	07	02	82	61		T		0.0										
2013	07	03	91	62		T		0.0										
2013	07	04	94	75		0.00		0.0										
2013	07	05	95	79		0.00		0.0										
2013	07	06	93	79		0.00		0.0										
2013	07	07	93	75		T		0.0										
2013	07	08	85	66		0.01		0.0										
2013	07	09	72	65		T		0.0										
2013	07	10	86	67		0.01		0.0										
2013	07	11	82	73		0.17		0.0										
2013	07	12	74	66		0.00		0.0										
2013	07	13	72	66		T		0.0										
2013	07	14	93	69		0.00		0.0										
2013	07	15	92	74		0.00		0.0										
2013	07	16	93	75		0.01		0.0										
2013	07	17	95	73		0.00		0.0										
2013	07	18	91	76		0.00		0.0										
2013	07	19	99	78		0.00		0.0										
2013	07	20	96	79		0.00		0.0										
2013	07	21	79	68		0.01		0.0										
2013	07	22	76	68		0.00		0.0										
2013	07	23	82	68		1.76		0.0										
2013	07	24	88	66		0.00		0.0										
2013	07	25	66	60		0.27		0.0										
2013	07	26	72	62		1.00		0.0										
2013	07	27	84	62		0.00		0.0										
2013	07	28	75	67		0.01		0.0										
2013	07	29	81	66		0.33		0.0										
2013	07	30	84	66		0.00		0.0										
2013	07	31	79	68		0.00		0.0										
		Summary	85	69		3.61		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	08	01	82	66		T		0.0										
2013	08	02	85	66		0.13		0.0										
2013	08	03	80	68		0.00		0.0										
2013	08	04	82	65		T		0.0										
2013	08	05	78	61		0.00		0.0										
2013	08	06	74	59		0.00		0.0										
2013	08	07	79	61		0.00		0.0										
2013	08	08	81	65		0.07		0.0										
2013	08	09	76	71		1.62		0.0										
2013	08	10	85	67		0.00		0.0										
2013	08	11	81	63		0.00		0.0										
2013	08	12	84	65		0.00		0.0										
2013	08	13	73	66		T		0.0										
2013	08	14	76	63		0.00		0.0										
2013	08	15	78	60		0.00		0.0										
2013	08	16	80	62		0.00		0.0										
2013	08	17	74	64		0.00		0.0										
2013	08	18	78	63		0.00		0.0										
2013	08	19	84	64		0.00		0.0										
2013	08	20	87	69		0.00		0.0										
2013	08	21	89	67		0.00		0.0										
2013	08	22	89	70		0.00		0.0										
2013	08	23	78	66		0.00		0.0										
2013	08	24	72	60		0.00		0.0										
2013	08	25	83	61		0.00		0.0										
2013	08	26	84	67		0.01		0.0										
2013	08	27	76	65		0.01		0.0										
2013	08	28	73	61		0.00		0.0										
2013	08	29	67	62		T		0.0										
2013	08	30	84	63		0.00		0.0										
2013	08	31	82	69		T		0.0										
		Summary	80	64		1.84		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	09	01	79	70		0.38		0.0										
2013	09	02	81	69		0.38		0.0										
2013	09	03	81	67		0.00		0.0										
2013	09	04	82	63		0.00		0.0										
2013	09	05	70	57		0.09		0.0										
2013	09	06	71	52		0.00		0.0										
2013	09	07	81	54		T		0.0										
2013	09	08	78	56		T		0.0										
2013	09	09	71	52		0.00		0.0										
2013	09	10	77	59		0.03		0.0										
2013	09	11	97	68		0.00		0.0										
2013	09	12	88	67		0.57		0.0										
2013	09	13	76	61		0.39		0.0										
2013	09	14	68	57		T		0.0										
2013	09	15	73	54		0.00		0.0										
2013	09	16	70	50		T		0.0										
2013	09	17	60	44		0.00		0.0										
2013	09	18	75	51		0.00		0.0										
2013	09	19	71	54		0.00		0.0										
2013	09	20	71	55		0.00		0.0										
2013	09	21	77	57		T		0.0										
2013	09	22	73	55		0.37		0.0										
2013	09	23	65	50		0.00		0.0										
2013	09	24	68	47		0.00		0.0										
2013	09	25	63	52		0.00		0.0										
2013	09	26	63	55		0.00		0.0										
2013	09	27	66	57		0.00		0.0										
2013	09	28	69	55		0.00		0.0										
2013	09	29	62	51		T		0.0										
2013	09	30	65	51		0.00		0.0										
Summary			73	56		2.21		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	10	01	75	52		0.00		0.0										
2013	10	02	82	62		0.00		0.0										
2013	10	03	79	61		0.00		0.0										
2013	10	04	67	59		0.03		0.0										
2013	10	05	68	59		T		0.0										
2013	10	06	62	56		0.31		0.0										
2013	10	07	78	60		0.11		0.0										
2013	10	08	68	52		0.00		0.0										
2013	10	09	61	49		0.00		0.0										
2013	10	10	61	48		0.00		0.0										
2013	10	11	66	52		0.00		0.0										
2013	10	12	61	53		T		0.0										
2013	10	13	61	49		0.00		0.0										
2013	10	14	61	44		0.00		0.0										
2013	10	15	64	52		0.00		0.0										
2013	10	16	62	51		0.00		0.0										
2013	10	17	73	54		0.03		0.0										
2013	10	18	70	56		0.02		0.0										
2013	10	19	67	50		0.00		0.0										
2013	10	20	64	49		T		0.0										
2013	10	21	68	45		0.00		0.0										
2013	10	22	71	48		T		0.0										
2013	10	23	53	46		0.00		0.0										
2013	10	24	56	43		0.00		0.0										
2013	10	25	52	39		0.00		0.0										
2013	10	26	57	37		0.00		0.0										
2013	10	27	57	44		0.03		0.0										
2013	10	28	60	39		0.00		0.0										
2013	10	29	49	35		0.00		0.0										
2013	10	30	53	39		0.05		0.0										
2013	10	31	63	40		0.03		0.0										
Summary			64	49		0.61		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	11	01	72	60		0.03		0.0										
2013	11	02	66	50		T		0.0										
2013	11	03	53	34		0.03		0.0										
2013	11	04	42	31		0.00		0.0										
2013	11	05	48	32		0.00		0.0										
2013	11	06	61	42		0.00		0.0										
2013	11	07	68	43		0.22		0.0										
2013	11	08	50	38		0.00		0.0										
2013	11	09	47	35		0.00		0.0										
2013	11	10	58	42		0.03		0.0										
2013	11	11	53	41		0.00		0.0										
2013	11	12	50	29		0.08		T										
2013	11	13	38	26		0.00		0.0										
2013	11	14	52	30		0.00		0.0										
2013	11	15	62	38		0.00		0.0										
2013	11	16	59	40		0.00		0.0										
2013	11	17	55	38		0.04		0.0										
2013	11	18	67	50		0.15		0.0										
2013	11	19	50	32		0.00		0.0										
2013	11	20	43	29		0.00		0.0										
2013	11	21	48	29		0.00		0.0										
2013	11	22	48	42		0.25		0.0										
2013	11	23	50	31		T		T										
2013	11	24	31	21		0.00		0.0										
2013	11	25	34	18		0.00		0.0										
2013	11	26	44	32		0.10		T										
2013	11	27	62	39		1.79		0.0										
2013	11	28	39	27		0.00		0.0										
2013	11	29	35	23		0.00		0.0										
2013	11	30	35	20		0.00		0.0										
		Summary	51	35		2.72		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2013	12	01	47	34		0.27		0.0										
2013	12	02	41	37		0.00		0.0										
2013	12	03	49	36		0.00		0.0										
2013	12	04	45	35		T		0.0										
2013	12	05	57	36		0.01		0.0										
2013	12	06	57	35		0.30		T										
2013	12	07	42	31		0.09		0.1										
2013	12	08	32	27		0.00		0.0										
2013	12	09	43	26		0.43		0.4										
2013	12	10	38	27		0.07		0.3										
2013	12	11	32	24		0.00		0.0										
2013	12	12	27	18		0.00		0.0										
2013	12	13	30	16		0.00		0.0										
2013	12	14	31	11		0.22		3.2										
2013	12	15	38	23		0.64		1.0										
2013	12	16	30	20		T		T										
2013	12	17	28	9		0.53		6.4										
2013	12	18	36	19		0.00		T										
2013	12	19	43	27		0.00		0.0										
2013	12	20	51	32		0.00		0.0										
2013	12	21	54	41		0.00		0.0										
2013	12	22	54	35		0.01		0.0										
2013	12	23	40	33		0.68		0.0										
2013	12	24	40	28		0.00		0.0										
2013	12	25	28	15		T		T										
2013	12	26	36	21		0.05		0.3										
2013	12	27	35	28		0.00		0.0										
2013	12	28	48	27		0.00		0.0										
2013	12	29	44	33		1.32		T										
2013	12	30	44	19		0.00		0.0										
2013	12	31	26	14		T		T										
		Summary	40	26		4.62		11.7										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	01	01	29	19		0.00		0.0										
2014	01	02	26	2		0.38		10.6										
2014	01	03	14	2		0.19		4.5										
2014	01	04	27	2		0.00		0.0										
2014	01	05	38	24		0.04		0.0										
2014	01	06	56	29		0.32		0.0										
2014	01	07	29	9		T		T										
2014	01	08	22	7		0.00		0.0										
2014	01	09	30	19		0.00		0.0										
2014	01	10	37	18		0.02		0.2										
2014	01	11	59	34		0.54		0.0										
2014	01	12	54	37		T		0.0										
2014	01	13	51	31		0.00		0.0										
2014	01	14	50	44		0.79		0.0										
2014	01	15	48	35		T		0.0										
2014	01	16	39	33		0.00		0.0										
2014	01	17	46	33		0.00		0.0										
2014	01	18	38	32		0.79		2.0										
2014	01	19	35	30		0.03		0.2										
2014	01	20	41	26		0.00		0.0										
2014	01	21	26	11		0.11		3.9										
2014	01	22	18	7		T		0.3										
2014	01	23	22	6		0.00		0.0										
2014	01	24	19	7		0.00		0.0										
2014	01	25	38	15		T		0.1										
2014	01	26	26	16		0.00		0.0										
2014	01	27	47	21		0.02		0.0										
2014	01	28	21	13		0.00		0.0										
2014	01	29	27	15		0.01		T										
2014	01	30	30	16		0.00		0.0										
2014	01	31	43	22		0.00		0.0										
Summary			35	20		3.24		21.8										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	02	01	42	32		0.00		0.0										
2014	02	02	55	31		0.02		0.0										
2014	02	03	41	27		0.17		1.6										
2014	02	04	35	23		0.00		0.0										
2014	02	05	33	24		1.11		10.7										
2014	02	06	28	19		T		T										
2014	02	07	30	19		0.00		0.0										
2014	02	08	29	18		0.00		0.0										
2014	02	09	30	21		0.03		0.3										
2014	02	10	30	20		T		0.1										
2014	02	11	25	14		0.00		0.0										
2014	02	12	23	8		0.00		0.0										
2014	02	13	36	21		1.35		3.2										
2014	02	14	37	29		0.31		0.1										
2014	02	15	35	27		0.33		3.6										
2014	02	16	33	23		0.02		0.4										
2014	02	17	29	14		0.00		0.0										
2014	02	18	35	14		0.22		2.5										
2014	02	19	36	21		0.25		T										
2014	02	20	48	33		0.08		T										
2014	02	21	44	34		0.22		0.0										
2014	02	22	50	34		0.00		0.0										
2014	02	23	52	34		0.00		0.0										
2014	02	24	45	24		0.00		0.0										
2014	02	25	29	22		0.00		0.0										
2014	02	26	32	16		0.00		0.0										
2014	02	27	30	12		0.02		0.4										
2014	02	28	25	10		0.00		0.0										
		Summary	36	22		4.13		22.9										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	03	01	36	16		0.00		0.0										
2014	03	02	40	30		T		T										
2014	03	03	30	16		0.00		0.0										
2014	03	04	31	12		0.00		0.0										
2014	03	05	29	20		T		0.1										
2014	03	06	25	11		0.00		0.0										
2014	03	07	34	16		0.00		0.0										
2014	03	08	55	27		0.00		0.0										
2014	03	09	43	30		0.00		0.0										
2014	03	10	44	28		0.03		0.6										
2014	03	11	60	34		0.00		0.0										
2014	03	12	46	37		0.43		0.0										
2014	03	13	37	17		0.06		1.5										
2014	03	14	39	16		0.00		0.0										
2014	03	15	57	38		0.01		0.0										
2014	03	16	37	23		0.00		0.0										
2014	03	17	27	16		0.00		0.0										
2014	03	18	33	20		0.00		0.0										
2014	03	19	41	27		T		0.0										
2014	03	20	52	37		0.29		0.0										
2014	03	21	45	34		0.00		0.0										
2014	03	22	57	28		T		0.0										
2014	03	23	44	22		0.00		0.0										
2014	03	24	33	17		0.00		0.0										
2014	03	25	39	21		0.00		0.0										
2014	03	26	35	24		T		T										
2014	03	27	46	21		0.00		0.0										
2014	03	28	60	35		0.02		0.0										
2014	03	29	52	39		0.97		0.0										
2014	03	30	43	36		2.23		0.0										
2014	03	31	42	34		0.44		T										
		Summary	42	25		4.48		2.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	04	01	47	34		0.00		0.0										
2014	04	02	46	37		0.00		0.0										
2014	04	03	54	34		0.00		0.0										
2014	04	04	44	37		0.26		0.0										
2014	04	05	54	38		0.23		0.0										
2014	04	06	59	35		0.00		0.0										
2014	04	07	59	38		0.04		0.0										
2014	04	08	65	43		0.67		0.0										
2014	04	09	59	41		0.00		0.0										
2014	04	10	60	34		0.00		0.0										
2014	04	11	69	48		T		0.0										
2014	04	12	69	49		0.04		0.0										
2014	04	13	63	45		0.04		0.0										
2014	04	14	75	57		0.00		0.0										
2014	04	15	68	41		0.62		0.0										
2014	04	16	45	31		0.36		0.3										
2014	04	17	40	32		0.00		0.0										
2014	04	18	42	31		0.00		0.0										
2014	04	19	63	37		0.00		0.0										
2014	04	20	48	39		0.00		0.0										
2014	04	21	69	36		0.00		0.0										
2014	04	22	73	47		0.05		0.0										
2014	04	23	57	46		0.23		0.0										
2014	04	24	59	42		0.00		0.0										
2014	04	25	57	43		0.00		0.0										
2014	04	26	47	42		0.20		0.0										
2014	04	27	50	41		0.15		0.0										
2014	04	28	54	42		T		0.0										
2014	04	29	44	42		T		0.0										
2014	04	30	45	41		0.35		0.0										
		Summary	56	40		3.24		0.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	05	01	60	44		0.62		0.0										
2014	05	02	69	50		0.01		0.0										
2014	05	03	67	50		0.00		0.0										
2014	05	04	62	50		T		0.0										
2014	05	05	66	50		0.00		0.0										
2014	05	06	64	47		0.00		0.0										
2014	05	07	69	47		0.00		0.0										
2014	05	08	62	48		0.00		0.0										
2014	05	09	59	50		T		0.0										
2014	05	10	80	57		0.34		0.0										
2014	05	11	80	62		T		0.0										
2014	05	12	85	52		0.00		0.0										
2014	05	13	52	46		0.00		0.0										
2014	05	14	63	46		T		0.0										
2014	05	15	77	57		T		0.0										
2014	05	16	73	59		0.06		0.0										
2014	05	17	75	58		0.65		0.0										
2014	05	18	63	52		0.00		0.0										
2014	05	19	68	52		0.05		0.0										
2014	05	20	69	53		T		0.0										
2014	05	21	65	52		0.00		0.0										
2014	05	22	59	51		0.25		0.0										
2014	05	23	57	52		0.02		0.0										
2014	05	24	61	52		0.18		0.0										
2014	05	25	66	52		0.00		0.0										
2014	05	26	79	55		0.01		0.0										
2014	05	27	74	50		0.48		0.0										
2014	05	28	50	44		0.08		0.0										
2014	05	29	58	43		0.00		0.0										
2014	05	30	66	48		0.11		0.0										
2014	05	31	60	52		T		0.0										
		Summary	66	51		2.86		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	06	01	66	51		0.00		0.0										
2014	06	02	83	56		0.00		0.0										
2014	06	03	72	57		0.00		0.0										
2014	06	04	60	55		0.14		0.0										
2014	06	05	60	57		0.78		0.0										
2014	06	06	76	57		0.00		0.0										
2014	06	07	80	61		0.00		0.0										
2014	06	08	81	67		0.00		0.0										
2014	06	09	81	66		T		0.0										
2014	06	10	79	59		0.85		0.0										
2014	06	11	63	58		T		0.0										
2014	06	12	66	59		T		0.0										
2014	06	13	64	59		0.54		0.0										
2014	06	14	77	58		0.01		0.0										
2014	06	15	80	58		0.00		0.0										
2014	06	16	73	62		0.00		0.0										
2014	06	17	84	62		0.02		0.0										
2014	06	18	87	68		T		0.0										
2014	06	19	84	67		0.00		0.0										
2014	06	20	77	61		0.00		0.0										
2014	06	21	75	57		0.00		0.0										
2014	06	22	71	59		0.00		0.0										
2014	06	23	77	59		0.00		0.0										
2014	06	24	84	60		0.00		0.0										
2014	06	25	89	66		0.00		0.0										
2014	06	26	81	60		0.28		0.0										
2014	06	27	72	59		0.00		0.0										
2014	06	28	80	59		0.00		0.0										
2014	06	29	86	62		0.00		0.0										
2014	06	30	89	64		0.00		0.0										
		Summary	77	60		2.62		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	07	01	89	69		0.00		0.0										
2014	07	02	91	73		T		0.0										
2014	07	03	92	69		0.28		0.0										
2014	07	04	76	64		1.88		0.0										
2014	07	05	80	59		0.35		0.0										
2014	07	06	85	66		0.00		0.0										
2014	07	07	88	69		0.08		0.0										
2014	07	08	92	73		T		0.0										
2014	07	09	88	73		0.00		0.0										
2014	07	10	82	66		0.00		0.0										
2014	07	11	73	63		0.00		0.0										
2014	07	12	80	62		0.00		0.0										
2014	07	13	85	68		T		0.0										
2014	07	14	86	71		0.67		0.0										
2014	07	15	85	71		T		0.0										
2014	07	16	76	69		0.85		0.0										
2014	07	17	81	67		0.00		0.0										
2014	07	18	76	65		0.00		0.0										
2014	07	19	72	63		0.00		0.0										
2014	07	20	72	61		T		0.0										
2014	07	21	73	61		0.00		0.0										
2014	07	22	87	63		0.00		0.0										
2014	07	23	92	71		0.00		0.0										
2014	07	24	76	63		T		0.0										
2014	07	25	83	62		0.00		0.0										
2014	07	26	85	64		0.00		0.0										
2014	07	27	80	66		0.35		0.0										
2014	07	28	84	65		0.11		0.0										
2014	07	29	79	64		0.00		0.0										
2014	07	30	78	63		0.00		0.0										
2014	07	31	81	62		0.00		0.0										
		Summary	82	66		4.57		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	08	01	82	65		0.00		0.0										
2014	08	02	72	62		0.03		0.0										
2014	08	03	70	62		T		0.0										
2014	08	04	80	62		T		0.0										
2014	08	05	82	70		0.00		0.0										
2014	08	06	83	70		0.01		0.0										
2014	08	07	79	64		0.01		0.0										
2014	08	08	85	61		0.00		0.0										
2014	08	09	78	65		0.00		0.0										
2014	08	10	80	66		0.00		0.0										
2014	08	11	84	65		0.00		0.0										
2014	08	12	82	64		0.00		0.0										
2014	08	13	69	64		1.06		0.0										
2014	08	14	77	62		0.00		0.0										
2014	08	15	75	60		T		0.0										
2014	08	16	78	61		0.00		0.0										
2014	08	17	81	64		T		0.0										
2014	08	18	79	62		0.00		0.0										
2014	08	19	74	59		0.00		0.0										
2014	08	20	74	59		0.00		0.0										
2014	08	21	72	60		0.00		0.0										
2014	08	22	72	63		0.08		0.0										
2014	08	23	72	61		0.00		0.0										
2014	08	24	75	63		0.00		0.0										
2014	08	25	81	67		0.00		0.0										
2014	08	26	85	64		0.00		0.0										
2014	08	27	91	67		0.02		0.0										
2014	08	28	82	64		0.00		0.0										
2014	08	29	71	59		0.00		0.0										
2014	08	30	79	58		0.00		0.0										
2014	08	31	85	67		0.54		0.0										
		Summary	78	63		1.75		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	09	01	85	72		0.00		0.0										
2014	09	02	93	71		0.01		0.0										
2014	09	03	85	72		0.00		0.0										
2014	09	04	83	66		0.00		0.0										
2014	09	05	91	67		0.00		0.0										
2014	09	06	92	69		0.22		0.0										
2014	09	07	76	63		0.15		0.0										
2014	09	08	71	59		0.00		0.0										
2014	09	09	69	61		0.00		0.0										
2014	09	10	70	60		0.00		0.0										
2014	09	11	80	62		0.00		0.0										
2014	09	12	68	56		0.00		0.0										
2014	09	13	67	53		0.13		0.0										
2014	09	14	66	52		0.00		0.0										
2014	09	15	67	48		0.00		0.0										
2014	09	16	65	55		T		0.0										
2014	09	17	69	54		0.00		0.0										
2014	09	18	75	55		0.00		0.0										
2014	09	19	56	46		0.00		0.0										
2014	09	20	73	47		0.00		0.0										
2014	09	21	82	63		0.01		0.0										
2014	09	22	74	53		0.00		0.0										
2014	09	23	72	50		0.00		0.0										
2014	09	24	66	54		0.00		0.0										
2014	09	25	62	53		0.00		0.0										
2014	09	26	69	54		0.00		0.0										
2014	09	27	81	60		0.00		0.0										
2014	09	28	87	60		0.00		0.0										
2014	09	29	74	57		T		0.0										
2014	09	30	57	56		0.18		0.0										
		Summary	74	58		0.70		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	10	01	57	56		1.16		0.0										
2014	10	02	56	51		0.16		0.0										
2014	10	03	55	48		0.01		0.0										
2014	10	04	63	53		0.35		0.0										
2014	10	05	61	49		0.00		0.0										
2014	10	06	67	43		0.00		0.0										
2014	10	07	73	55		0.01		0.0										
2014	10	08	73	58		0.01		0.0										
2014	10	09	66	50		0.00		0.0										
2014	10	10	63	51		0.00		0.0										
2014	10	11	54	47		0.31		0.0										
2014	10	12	59	44		0.00		0.0										
2014	10	13	63	45		0.00		0.0										
2014	10	14	78	57		0.00		0.0										
2014	10	15	81	61		0.00		0.0										
2014	10	16	70	60		0.63		0.0										
2014	10	17	71	57		0.00		0.0										
2014	10	18	71	55		T		0.0										
2014	10	19	56	43		0.00		0.0										
2014	10	20	58	39		0.00		0.0										
2014	10	21	62	49		T		0.0										
2014	10	22	56	50		0.87		0.0										
2014	10	23	54	48		2.25		0.0										
2014	10	24	52	46		0.05		0.0										
2014	10	25	64	46		0.00		0.0										
2014	10	26	59	47		T		0.0										
2014	10	27	63	46		0.00		0.0										
2014	10	28	60	45		0.00		0.0										
2014	10	29	74	52		0.02		0.0										
2014	10	30	59	46		0.00		0.0										
2014	10	31	54	45		0.00		0.0										
		Summary	63	50		5.83		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	11	01	49	39		0.59		0.0										
2014	11	02	42	34		0.31		T										
2014	11	03	53	36		0.00		0.0										
2014	11	04	57	45		0.00		0.0										
2014	11	05	66	47		0.00		0.0										
2014	11	06	51	46		0.59		0.0										
2014	11	07	49	39		T		0.0										
2014	11	08	48	35		0.00		0.0										
2014	11	09	56	40		0.00		0.0										
2014	11	10	58	37		0.00		0.0										
2014	11	11	63	42		0.00		0.0										
2014	11	12	60	46		0.00		0.0										
2014	11	13	50	38		0.06		0.0										
2014	11	14	44	33		0.23		T										
2014	11	15	40	30		0.00		0.0										
2014	11	16	42	29		T		0.0										
2014	11	17	48	37		1.64		0.0										
2014	11	18	44	27		0.00		0.0										
2014	11	19	37	24		0.00		0.0										
2014	11	20	48	31		0.00		0.0										
2014	11	21	36	27		0.00		0.0										
2014	11	22	44	24		0.00		0.0										
2014	11	23	59	42		T		0.0										
2014	11	24	65	42		0.28		0.0										
2014	11	25	62	48		0.00		0.0										
2014	11	26	50	33		1.44		T										
2014	11	27	38	31		0.02		0.3										
2014	11	28	35	27		0.11		2.3										
2014	11	29	34	23		0.00		0.0										
2014	11	30	57	32		0.00		0.0										
		Summary	50	35		5.27		2.6										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2014	12	01	64	39		0.01		0.0										
2014	12	02	42	33		0.10		T										
2014	12	03	51	37		0.44		0.0										
2014	12	04	43	30		0.00		0.0										
2014	12	05	42	26		0.11		0.0										
2014	12	06	45	38		1.09		0.0										
2014	12	07	38	21		0.13		0.0										
2014	12	08	29	18		0.03		0.3										
2014	12	09	49	29		2.90		T										
2014	12	10	48	38		0.28		0.0										
2014	12	11	39	32		0.02		T										
2014	12	12	39	31		T		T										
2014	12	13	42	32		T		T										
2014	12	14	45	33		0.00		0.0										
2014	12	15	42	32		0.00		0.0										
2014	12	16	44	35		T		0.0										
2014	12	17	49	41		0.43		0.0										
2014	12	18	44	36		0.01		0.0										
2014	12	19	37	29		0.00		0.0										
2014	12	20	36	27		T		T										
2014	12	21	36	30		T		T										
2014	12	22	44	33		0.05		0.0										
2014	12	23	47	42		0.25		0.0										
2014	12	24	46	41		0.56		0.0										
2014	12	25	59	44		0.14		0.0										
2014	12	26	50	37		0.00		0.0										
2014	12	27	52	38		0.00		0.0										
2014	12	28	52	40		0.01		0.0										
2014	12	29	41	30		0.00		0.0										
2014	12	30	30	22		0.00		0.0										
2014	12	31	30	20		0.00		0.0										
		Summary	44	33		6.56		0.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	01	01	33	22		0.00		0.0										
2015	01	02	41	31		0.00		0.0										
2015	01	03	37	22		0.62		1.4										
2015	01	04	52	35		0.57		0.0										
2015	01	05	50	17		0.00		0.0										
2015	01	06	18	15		0.02		0.2										
2015	01	07	26	4		T		T										
2015	01	08	19	-1		0.00		0.0										
2015	01	09	30	19		0.01		0.2										
2015	01	10	24	17		0.00		0.0										
2015	01	11	33	15		0.00		0.0										
2015	01	12	38	33		0.20		T										
2015	01	13	35	15		0.00		0.0										
2015	01	14	25	14		T		T										
2015	01	15	31	25		0.12		0.8										
2015	01	16	38	15		0.00		0.0										
2015	01	17	22	9		0.00		0.0										
2015	01	18	51	20		0.15		0.0										
2015	01	19	46	32		0.00		0.0										
2015	01	20	39	27		0.00		0.0										
2015	01	21	34	22		0.00		0.0										
2015	01	22	37	29		T		T										
2015	01	23	37	24		0.00		0.0										
2015	01	24	34	31		0.71		5.1										
2015	01	25	38	19		0.00		0.0										
2015	01	26	29	11		0.10		2.3										
2015	01	27	19	14		0.95		22.1										
2015	01	28	24	13		0.01		0.2										
2015	01	29	32	10		T		T										
2015	01	30	34	19		0.06		0.7										
2015	01	31	21	11		0.05		1.3										
Summary			33	19		3.57		34.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	02	01	30	12		0.00		0.0										
2015	02	02	31	10		0.78		16.2										
2015	02	03	22	6		0.00		0.0										
2015	02	04	38	14		0.01		0.0										
2015	02	05	36	7		0.09		0.8										
2015	02	06	21	5		T		T										
2015	02	07	29	16		0.07		0.9										
2015	02	08	29	13		0.37		7.4										
2015	02	09	25	14		0.88		14.8										
2015	02	10	30	14		0.05		0.7										
2015	02	11	25	14		0.01		0.5										
2015	02	12	30	16		0.03		1.0										
2015	02	13	22	7		0.00		0.0										
2015	02	14	30	3		0.23		3.2										
2015	02	15	20	-2		0.39		13.0										
2015	02	16	19	-3		0.00		0.0										
2015	02	17	23	10		0.02		0.6										
2015	02	18	29	17		0.01		T										
2015	02	19	30	10		0.06		2.4										
2015	02	20	20	5		0.00		0.0										
2015	02	21	34	4		0.17		1.1										
2015	02	22	39	28		0.11		0.1										
2015	02	23	33	4		0.00		0.0										
2015	02	24	19	2		T		T										
2015	02	25	35	14		0.07		1.9										
2015	02	26	22	17		0.02		0.2										
2015	02	27	27	15		0.00		0.0										
2015	02	28	31	12		0.00		0.0										
		Summary	28	10		3.37		64.8										

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Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	03	01	30	12		0.17		1.9										
2015	03	02	37	26		0.01		0.2										
2015	03	03	33	20		0.26		1.6										
2015	03	04	43	33		0.02		0.0										
2015	03	05	39	18		T		T										
2015	03	06	24	9		0.00		0.0										
2015	03	07	38	17		0.00		0.0										
2015	03	08	42	24		T		T										
2015	03	09	48	26		0.00		0.0										
2015	03	10	48	31		0.06		0.0										
2015	03	11	57	37		0.01		0.0										
2015	03	12	43	25		0.00		0.0										
2015	03	13	40	24		0.00		0.0										
2015	03	14	39	31		0.80		0.0										
2015	03	15	41	27		0.27		2.9										
2015	03	16	45	26		0.00		0.0										
2015	03	17	51	28		0.14		T										
2015	03	18	30	22		0.00		0.0										
2015	03	19	34	19		0.00		0.0										
2015	03	20	32	23		0.05		0.5										
2015	03	21	41	28		0.09		1.2										
2015	03	22	39	21		0.00		0.0										
2015	03	23	33	18		0.00		0.0										
2015	03	24	35	20		0.00		0.0										
2015	03	25	49	28		0.04		0.0										
2015	03	26	56	38		0.80		0.0										
2015	03	27	44	37		0.21		0.0										
2015	03	28	40	30		0.12		0.3										
2015	03	29	42	26		0.00		0.0										
2015	03	30	45	30		T		T										
2015	03	31	50	37		0.00		0.0										
		Summary	41	26		3.05		8.6										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	04	01	47	30		0.00		0.0										
2015	04	02	61	30		0.00		0.0										
2015	04	03	59	45		0.03		0.0										
2015	04	04	52	36		0.39		0.0										
2015	04	05	49	32		0.00		0.0										
2015	04	06	42	36		0.00		0.0										
2015	04	07	42	36		0.03		0.0										
2015	04	08	42	34		0.26		T										
2015	04	09	37	33		0.09		0.0										
2015	04	10	55	36		0.09		0.0										
2015	04	11	57	42		0.00		0.0										
2015	04	12	68	39		0.00		0.0										
2015	04	13	69	41		0.00		0.0										
2015	04	14	65	52		0.01		0.0										
2015	04	15	67	50		0.00		0.0										
2015	04	16	60	41		0.00		0.0										
2015	04	17	65	47		0.06		0.0										
2015	04	18	60	43		0.00		0.0										
2015	04	19	50	41		0.00		0.0										
2015	04	20	51	41		0.61		0.0										
2015	04	21	65	46		0.54		0.0										
2015	04	22	67	43		T		0.0										
2015	04	23	51	38		0.00		0.0										
2015	04	24	50	37		T		T										
2015	04	25	56	36		0.00		0.0										
2015	04	26	56	43		0.00		0.0										
2015	04	27	57	45		0.10		0.0										
2015	04	28	64	42		0.07		0.0										
2015	04	29	54	48		0.00		0.0										
2015	04	30	55	44		0.00		0.0										
		Summary	56	40		2.28		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	05	01	49	39		0.00		0.0										
2015	05	02	50	39		0.00		0.0										
2015	05	03	67	45		0.00		0.0										
2015	05	04	84	49		0.00		0.0										
2015	05	05	70	54		0.02		0.0										
2015	05	06	73	52		0.00		0.0										
2015	05	07	79	53		0.00		0.0										
2015	05	08	71	46		0.00		0.0										
2015	05	09	71	46		0.00		0.0										
2015	05	10	89	59		0.00		0.0										
2015	05	11	80	50		0.00		0.0										
2015	05	12	87	48		0.02		0.0										
2015	05	13	69	53		0.00		0.0										
2015	05	14	69	49		0.00		0.0										
2015	05	15	67	48		0.00		0.0										
2015	05	16	71	55		T		0.0										
2015	05	17	67	52		0.00		0.0										
2015	05	18	58	49		0.00		0.0										
2015	05	19	65	52		0.27		0.0										
2015	05	20	66	51		0.00		0.0										
2015	05	21	67	45		0.00		0.0										
2015	05	22	76	52		T		0.0										
2015	05	23	65	44		0.00		0.0										
2015	05	24	83	51		0.00		0.0										
2015	05	25	81	58		T		0.0										
2015	05	26	87	64		0.00		0.0										
2015	05	27	85	65		0.00		0.0										
2015	05	28	86	64		T		0.0										
2015	05	29	72	55		0.00		0.0										
2015	05	30	88	58		0.00		0.0										
2015	05	31	77	48		0.91		0.0										
		Summary	73	51		1.22		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	06	01	49	47		0.38		0.0										
2015	06	02	49	46		0.74		0.0										
2015	06	03	56	47		0.00		0.0										
2015	06	04	58	49		0.00		0.0										
2015	06	05	59	50		T		0.0										
2015	06	06	67	52		0.09		0.0										
2015	06	07	67	53		0.00		0.0										
2015	06	08	76	53		T		0.0										
2015	06	09	78	64		T		0.0										
2015	06	10	82	62		0.00		0.0										
2015	06	11	88	64		0.00		0.0										
2015	06	12	79	65		0.00		0.0										
2015	06	13	85	64		T		0.0										
2015	06	14	74	62		0.00		0.0										
2015	06	15	63	54		0.40		0.0										
2015	06	16	71	56		T		0.0										
2015	06	17	69	59		0.00		0.0										
2015	06	18	76	57		0.00		0.0										
2015	06	19	86	63		0.00		0.0										
2015	06	20	75	58		0.04		0.0										
2015	06	21	76	60		1.72		0.0										
2015	06	22	77	61		0.00		0.0										
2015	06	23	88	60		0.01		0.0										
2015	06	24	84	67		0.00		0.0										
2015	06	25	81	64		0.00		0.0										
2015	06	26	72	59		T		0.0										
2015	06	27	68	57		0.20		0.0										
2015	06	28	59	52		1.43		0.0										
2015	06	29	75	53		T		0.0										
2015	06	30	75	60		0.00		0.0										
		Summary	72	57		5.01		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	07	01	82	62		0.54		0.0										
2015	07	02	80	64		0.00		0.0										
2015	07	03	76	63		0.00		0.0										
2015	07	04	72	62		T		0.0										
2015	07	05	83	61		0.00		0.0										
2015	07	06	80	68		0.00		0.0										
2015	07	07	84	65		0.02		0.0										
2015	07	08	88	69		T		0.0										
2015	07	09	69	63		0.15		0.0										
2015	07	10	77	60		1.12		0.0										
2015	07	11	83	68		0.00		0.0										
2015	07	12	89	72		0.00		0.0										
2015	07	13	77	67		0.00		0.0										
2015	07	14	82	65		0.03		0.0										
2015	07	15	82	67		T		0.0										
2015	07	16	68	59		0.00		0.0										
2015	07	17	75	60		T		0.0										
2015	07	18	78	64		0.14		0.0										
2015	07	19	90	71		T		0.0										
2015	07	20	92	70		T		0.0										
2015	07	21	81	70		T		0.0										
2015	07	22	84	69		0.00		0.0										
2015	07	23	82	67		0.00		0.0										
2015	07	24	81	66		0.01		0.0										
2015	07	25	69	62		0.00		0.0										
2015	07	26	79	63		T		0.0										
2015	07	27	86	68		0.06		0.0										
2015	07	28	86	70		0.00		0.0										
2015	07	29	92	71		0.00		0.0										
2015	07	30	91	74		0.02		0.0										
2015	07	31	89	73		0.00		0.0										
		Summary	82	66		2.09		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	08	01	90	68		T		0.0										
2015	08	02	88	68		0.00		0.0										
2015	08	03	90	68		0.00		0.0										
2015	08	04	89	66		0.49		T										
2015	08	05	85	65		0.00		0.0										
2015	08	06	82	65		0.00		0.0										
2015	08	07	73	64		0.00		0.0										
2015	08	08	76	61		0.00		0.0										
2015	08	09	73	62		0.00		0.0										
2015	08	10	83	63		0.00		0.0										
2015	08	11	72	64		0.83		0.0										
2015	08	12	85	68		0.00		0.0										
2015	08	13	82	66		0.00		0.0										
2015	08	14	86	63		0.00		0.0										
2015	08	15	91	68		0.08		0.0										
2015	08	16	90	67		0.00		0.0										
2015	08	17	91	71		0.00		0.0										
2015	08	18	87	71		0.14		0.0										
2015	08	19	88	71		0.00		0.0										
2015	08	20	78	68		0.00		0.0										
2015	08	21	83	67		0.63		0.0										
2015	08	22	73	67		T		0.0										
2015	08	23	71	67		0.02		0.0										
2015	08	24	75	68		T		0.0										
2015	08	25	81	67		0.00		0.0										
2015	08	26	85	69		T		0.0										
2015	08	27	82	65		0.00		0.0										
2015	08	28	75	64		0.00		0.0										
2015	08	29	82	63		0.00		0.0										
2015	08	30	88	69		0.00		0.0										
2015	08	31	90	71		0.00		0.0										
		Summary	83	67		2.19		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	09	01	79	69		0.00		0.0										
2015	09	02	91	66		0.00		0.0										
2015	09	03	82	70		0.01		0.0										
2015	09	04	72	62		T		0.0										
2015	09	05	73	58		0.00		0.0										
2015	09	06	82	61		0.00		0.0										
2015	09	07	93	66		0.00		0.0										
2015	09	08	96	72		0.20		0.0										
2015	09	09	93	72		0.00		0.0										
2015	09	10	77	64		0.17		0.0										
2015	09	11	73	63		0.66		0.0										
2015	09	12	71	60		0.01		0.0										
2015	09	13	66	63		0.38		0.0										
2015	09	14	72	57		0.00		0.0										
2015	09	15	84	62		0.00		0.0										
2015	09	16	81	65		0.00		0.0										
2015	09	17	89	64		0.00		0.0										
2015	09	18	85	65		0.00		0.0										
2015	09	19	79	62		0.00		0.0										
2015	09	20	75	57		T		0.0										
2015	09	21	66	53		0.00		0.0										
2015	09	22	68	56		0.00		0.0										
2015	09	23	68	54		0.00		0.0										
2015	09	24	74	58		0.00		0.0										
2015	09	25	66	55		0.00		0.0										
2015	09	26	63	50		0.00		0.0										
2015	09	27	64	48		0.00		0.0										
2015	09	28	78	56		0.00		0.0										
2015	09	29	84	65		0.04		0.0										
2015	09	30	78	57		2.46		0.0										
		Summary	77	61		3.93		0.0										

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Record of Climatological Observations

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Generated on 06/07/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	10	01	59	54		T		0.0										
2015	10	02	54	50		0.08		0.0										
2015	10	03	54	49		0.01		0.0										
2015	10	04	56	51		0.00		0.0										
2015	10	05	61	48		0.00		0.0										
2015	10	06	64	48		0.00		0.0										
2015	10	07	72	52		0.00		0.0										
2015	10	08	62	51		0.00		0.0										
2015	10	09	72	52		0.34		0.0										
2015	10	10	61	48		0.00		0.0										
2015	10	11	68	48		0.00		0.0										
2015	10	12	76	51		0.00		0.0										
2015	10	13	72	55		0.12		0.0										
2015	10	14	68	51		0.00		0.0										
2015	10	15	62	47		0.00		0.0										
2015	10	16	61	50		T		0.0										
2015	10	17	56	40		T		0.0										
2015	10	18	47	33		0.00		T										
2015	10	19	48	31		0.00		0.0										
2015	10	20	66	45		T		0.0										
2015	10	21	61	53		0.07		0.0										
2015	10	22	73	52		T		0.0										
2015	10	23	59	40		0.00		0.0										
2015	10	24	49	38		0.00		0.0										
2015	10	25	63	48		0.03		0.0										
2015	10	26	52	43		0.00		0.0										
2015	10	27	54	38		0.00		0.0										
2015	10	28	65	42		0.36		0.0										
2015	10	29	75	57		0.73		0.0										
2015	10	30	61	42		0.00		0.0										
2015	10	31	52	38		0.00		0.0										
		Summary	61	47		1.74		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	11	01	62	48		T		0.0										
2015	11	02	64	51		0.00		0.0										
2015	11	03	73	47		0.00		0.0										
2015	11	04	60	49		0.00		0.0										
2015	11	05	76	50		0.00		0.0										
2015	11	06	73	62		0.00		0.0										
2015	11	07	69	50		0.00		0.0										
2015	11	08	56	44		0.00		0.0										
2015	11	09	60	41		0.00		0.0										
2015	11	10	53	44		0.07		0.0										
2015	11	11	50	46		0.54		0.0										
2015	11	12	57	46		0.04		0.0										
2015	11	13	59	46		0.01		0.0										
2015	11	14	47	37		0.00		0.0										
2015	11	15	54	37		0.00		0.0										
2015	11	16	61	39		0.00		0.0										
2015	11	17	45	33		0.00		0.0										
2015	11	18	48	31		0.00		0.0										
2015	11	19	55	43		T		0.0										
2015	11	20	61	44		0.86		0.0										
2015	11	21	48	38		0.00		0.0										
2015	11	22	49	36		0.30		0.0										
2015	11	23	42	30		0.04		0.0										
2015	11	24	44	29		0.00		0.0										
2015	11	25	44	30		0.00		0.0										
2015	11	26	59	38		0.00		0.0										
2015	11	27	64	48		0.00		0.0										
2015	11	28	60	41		0.21		0.0										
2015	11	29	44	32		0.00		0.0										
2015	11	30	38	28		0.00		0.0										
		Summary	56	41		2.07		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2015	12	01	45	32		0.14		0.0										
2015	12	02	51	39		0.32		0.0										
2015	12	03	52	41		T		0.0										
2015	12	04	48	38		0.00		0.0										
2015	12	05	53	39		0.00		0.0										
2015	12	06	59	36		0.00		0.0										
2015	12	07	56	37		0.00		0.0										
2015	12	08	44	37		T		0.0										
2015	12	09	46	37		T		0.0										
2015	12	10	58	43		T		0.0										
2015	12	11	58	43		0.00		0.0										
2015	12	12	61	49		0.00		0.0										
2015	12	13	53	46		0.00		0.0										
2015	12	14	58	46		0.42		0.0										
2015	12	15	61	48		0.19		0.0										
2015	12	16	48	38		0.00		0.0										
2015	12	17	52	39		0.55		0.0										
2015	12	18	52	39		0.04		0.0										
2015	12	19	40	33		0.00		0.0										
2015	12	20	41	31		0.00		0.0										
2015	12	21	53	32		0.00		0.0										
2015	12	22	60	48		0.23		0.0										
2015	12	23	56	45		0.76		0.0										
2015	12	24	69	48		0.24		0.0										
2015	12	25	62	49		0.00		0.0										
2015	12	26	55	41		0.00		0.0										
2015	12	27	50	38		0.26		0.0										
2015	12	28	38	29		T		T										
2015	12	29	40	24		1.02		0.9										
2015	12	30	37	25		0.03		0.0										
2015	12	31	47	33		0.08		0.0										
		Summary	52	39		4.28		0.9										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	01	01	41	33		0.00		T										
2016	01	02	40	31		0.00		0.0										
2016	01	03	44	31		0.00		0.0										
2016	01	04	36	14		T		T										
2016	01	05	26	8		0.00		0.0										
2016	01	06	45	21		0.00		0.0										
2016	01	07	43	26		0.00		0.0										
2016	01	08	42	30		0.00		0.0										
2016	01	09	41	38		0.01		0.0										
2016	01	10	58	38		1.38		0.0										
2016	01	11	51	25		0.00		0.0										
2016	01	12	37	21		0.08		0.3										
2016	01	13	33	21		0.00		T										
2016	01	14	30	21		T		T										
2016	01	15	42	26		0.00		0.0										
2016	01	16	43	34		1.22		T										
2016	01	17	38	29		0.10		1.3										
2016	01	18	29	19		0.11		1.8										
2016	01	19	25	16		0.00		0.0										
2016	01	20	33	19		0.00		0.0										
2016	01	21	33	21		0.00		0.0										
2016	01	22	32	19		0.00		0.0										
2016	01	23	32	20		0.37		6.1										
2016	01	24	36	18		T		T										
2016	01	25	35	26		0.00		0.0										
2016	01	26	51	28		0.00		0.0										
2016	01	27	45	31		0.00		0.0										
2016	01	28	42	26		0.00		0.0										
2016	01	29	41	33		0.00		T										
2016	01	30	43	30		0.00		0.0										
2016	01	31	57	38		0.00		0.0										
		Summary	39	26		3.27		9.5										

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Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	02	01	65	39		0.00		0.0										
2016	02	02	50	36		0.00		0.0										
2016	02	03	57	35		0.33		0.0										
2016	02	04	56	43		0.01		0.0										
2016	02	05	43	25		0.96		6.8										
2016	02	06	35	24		0.00		0.0										
2016	02	07	44	29		0.00		0.0										
2016	02	08	38	18		0.53		6.4										
2016	02	09	29	20		T		0.1										
2016	02	10	36	20		T		0.1										
2016	02	11	31	11		0.01		0.2										
2016	02	12	24	8		0.00		0.0										
2016	02	13	24	-4		0.00		0.0										
2016	02	14	12	-9		0.00		0.0										
2016	02	15	35	4		0.26		1.3										
2016	02	16	54	31		0.66		0.0										
2016	02	17	46	34		0.00		0.0										
2016	02	18	35	24		0.00		0.0										
2016	02	19	37	20		T		0.1										
2016	02	20	60	33		0.01		T										
2016	02	21	54	42		0.00		0.0										
2016	02	22	43	30		0.00		0.0										
2016	02	23	39	26		T		T										
2016	02	24	57	38		0.59		0.0										
2016	02	25	62	41		0.81		0.0										
2016	02	26	41	26		0.00		0.0										
2016	02	27	39	21		0.00		0.0										
2016	02	28	58	36		0.00		0.0										
2016	02	29	64	43		T		0.0										
		Summary	44	26		4.17		15.0										

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			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	03	01	49	34		0.00		0.0										
2016	03	02	53	25		0.37		0.0										
2016	03	03	34	21		0.00		0.0										
2016	03	04	31	26		0.01		0.5										
2016	03	05	34	23		0.00		0.0										
2016	03	06	42	30		0.00		0.0										
2016	03	07	51	30		0.00		0.0										
2016	03	08	48	36		0.00		0.0										
2016	03	09	77	40		0.00		0.0										
2016	03	10	66	47		0.40		0.0										
2016	03	11	50	41		0.09		0.0										
2016	03	12	60	36		0.00		0.0										
2016	03	13	63	45		0.00		0.0										
2016	03	14	45	39		0.21		0.0										
2016	03	15	45	41		1.14		0.0										
2016	03	16	48	41		0.03		0.0										
2016	03	17	64	43		0.07		0.0										
2016	03	18	52	35		0.03		0.0										
2016	03	19	45	29		0.00		0.0										
2016	03	20	35	26		0.02		T										
2016	03	21	44	28		0.22		3.6										
2016	03	22	49	33		0.00		0.0										
2016	03	23	63	42		T		0.0										
2016	03	24	43	36		T		0.0										
2016	03	25	46	37		0.16		0.0										
2016	03	26	43	34		0.00		0.0										
2016	03	27	42	34		0.00		0.0										
2016	03	28	47	38		0.41		0.0										
2016	03	29	51	38		0.00		0.0										
2016	03	30	59	34		0.00		0.0										
2016	03	31	71	43		0.00		0.0										
		Summary	50	35		3.16		4.1										

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			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	04	01	69	59		0.05		0.0										
2016	04	02	59	42		0.32		0.0										
2016	04	03	43	29		0.49		1.9										
2016	04	04	30	24		0.41		4.7										
2016	04	05	37	22		0.00		0.0										
2016	04	06	42	25		0.00		0.0										
2016	04	07	58	42		1.03		0.0										
2016	04	08	53	37		T		0.0										
2016	04	09	46	32		0.00		0.0										
2016	04	10	49	31		0.00		0.0										
2016	04	11	60	42		0.01		0.0										
2016	04	12	60	43		0.22		0.0										
2016	04	13	50	38		0.00		0.0										
2016	04	14	49	38		0.00		0.0										
2016	04	15	54	38		0.00		0.0										
2016	04	16	54	41		0.00		0.0										
2016	04	17	54	39		0.00		0.0										
2016	04	18	67	42		0.00		0.0										
2016	04	19	54	44		0.02		0.0										
2016	04	20	51	44		0.00		0.0										
2016	04	21	77	43		0.00		0.0										
2016	04	22	78	58		T		0.0										
2016	04	23	64	48		0.09		0.0										
2016	04	24	50	42		0.00		0.0										
2016	04	25	57	44		0.00		0.0										
2016	04	26	51	37		0.27		0.0										
2016	04	27	62	37		0.00		0.0										
2016	04	28	54	41		0.00		0.0										
2016	04	29	51	43		0.00		0.0										
2016	04	30	55	41		0.00		0.0										
		Summary	55	40		2.91		6.6										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	05	01	53	43		0.10		0.0										
2016	05	02	51	43		0.39		0.0										
2016	05	03	49	45		0.10		0.0										
2016	05	04	50	43		0.48		0.0										
2016	05	05	47	44		0.15		0.0										
2016	05	06	53	46		0.09		0.0										
2016	05	07	51	46		T		0.0										
2016	05	08	63	46		0.02		0.0										
2016	05	09	66	46		0.00		0.0										
2016	05	10	71	47		0.00		0.0										
2016	05	11	68	54		0.00		0.0										
2016	05	12	66	54		0.00		0.0										
2016	05	13	74	52		0.11		0.0										
2016	05	14	77	59		T		0.0										
2016	05	15	61	45		0.00		0.0										
2016	05	16	59	42		0.00		0.0										
2016	05	17	70	50		0.00		0.0										
2016	05	18	59	49		0.00		0.0										
2016	05	19	60	50		T		0.0										
2016	05	20	71	51		0.00		0.0										
2016	05	21	76	53		0.00		0.0										
2016	05	22	62	52		T		0.0										
2016	05	23	73	51		0.00		0.0										
2016	05	24	59	52		0.26		0.0										
2016	05	25	88	53		0.00		0.0										
2016	05	26	79	58		0.00		0.0										
2016	05	27	73	58		0.00		0.0										
2016	05	28	92	67		0.00		0.0										
2016	05	29	77	53		T		0.0										
2016	05	30	76	52		1.13		0.0										
2016	05	31	87	68		0.00		0.0										
		Summary	66	51		2.83		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	06	01	73	57		0.00		0.0										
2016	06	02	62	56		0.00		0.0										
2016	06	03	70	57		0.00		0.0										
2016	06	04	70	61		0.00		0.0										
2016	06	05	68	60		0.91		0.0										
2016	06	06	84	65		0.00		0.0										
2016	06	07	86	63		0.15		0.0										
2016	06	08	74	57		T		0.0										
2016	06	09	69	54		0.00		0.0										
2016	06	10	72	55		0.00		0.0										
2016	06	11	68	54		0.02		0.0										
2016	06	12	80	55		0.00		0.0										
2016	06	13	73	54		0.00		0.0										
2016	06	14	79	55		0.00		0.0										
2016	06	15	85	66		0.00		0.0										
2016	06	16	77	61		0.00		0.0										
2016	06	17	74	59		0.12		0.0										
2016	06	18	72	60		0.00		0.0										
2016	06	19	82	57		0.00		0.0										
2016	06	20	83	60		0.00		0.0										
2016	06	21	87	64		0.02		0.0										
2016	06	22	78	64		T		0.0										
2016	06	23	77	60		0.00		0.0										
2016	06	24	72	61		0.00		0.0										
2016	06	25	73	59		0.00		0.0										
2016	06	26	84	59		0.00		0.0										
2016	06	27	86	64		0.00		0.0										
2016	06	28	79	68		0.08		0.0										
2016	06	29	87	67		0.03		0.0										
2016	06	30	81	68		0.00		0.0										
		Summary	77	60		1.33		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	07	01	86	68		0.20		0.0										
2016	07	02	80	65		0.00		0.0										
2016	07	03	84	64		0.00		0.0										
2016	07	04	88	66		0.00		0.0										
2016	07	05	76	64		0.23		0.0										
2016	07	06	94	71		0.00		0.0										
2016	07	07	79	61		0.00		0.0										
2016	07	08	67	61		0.02		0.0										
2016	07	09	65	59		0.11		0.0										
2016	07	10	64	59		0.09		0.0										
2016	07	11	72	59		T		0.0										
2016	07	12	88	65		0.00		0.0										
2016	07	13	92	65		0.00		0.0										
2016	07	14	87	69		T		0.0										
2016	07	15	96	72		0.00		0.0										
2016	07	16	94	75		0.00		0.0										
2016	07	17	79	68		0.00		0.0										
2016	07	18	95	67		0.01		0.0										
2016	07	19	84	68		0.00		0.0										
2016	07	20	84	65		0.00		0.0										
2016	07	21	91	67		0.00		0.0										
2016	07	22	98	73		0.00		0.0										
2016	07	23	94	72		T		0.0										
2016	07	24	91	68		0.00		0.0										
2016	07	25	92	67		0.00		0.0										
2016	07	26	94	76		0.00		0.0										
2016	07	27	87	73		0.00		0.0										
2016	07	28	92	73		0.00		0.0										
2016	07	29	79	72		0.06		0.0										
2016	07	30	80	71		0.00		0.0										
2016	07	31	74	68		0.15		0.0										
		Summary	85	67		0.87		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	08	01	75	69		T		0.0										
2016	08	02	74	65		0.04		0.0										
2016	08	03	79	62		0.00		0.0										
2016	08	04	82	64		0.00		0.0										
2016	08	05	89	64		0.00		0.0										
2016	08	06	89	70		0.02		0.0										
2016	08	07	89	72		0.00		0.0										
2016	08	08	82	69		0.00		0.0										
2016	08	09	84	70		0.00		0.0										
2016	08	10	80	68		0.23		0.0										
2016	08	11	96	75		0.00		0.0										
2016	08	12	98	78		0.01		0.0										
2016	08	13	82	68		0.34		0.0										
2016	08	14	96	69		0.18		0.0										
2016	08	15	90	73		0.00		0.0										
2016	08	16	81	69		T		0.0										
2016	08	17	85	72		0.00		0.0										
2016	08	18	90	69		T		0.0										
2016	08	19	81	67		0.00		0.0										
2016	08	20	86	66		0.00		0.0										
2016	08	21	78	65		0.01		0.0										
2016	08	22	80	65		0.89		0.0										
2016	08	23	82	61		0.00		0.0										
2016	08	24	88	65		0.00		0.0										
2016	08	25	88	68		0.00		0.0										
2016	08	26	91	73		0.00		0.0										
2016	08	27	83	69		0.00		0.0										
2016	08	28	78	66		0.00		0.0										
2016	08	29	90	69		0.00		0.0										
2016	08	30	77	64		0.00		0.0										
2016	08	31	82	68		T		0.0										
		Summary	85	68		1.72		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	09	01	76	68		0.02		0.0										
2016	09	02	75	64		0.00		0.0										
2016	09	03	70	60		0.00		0.0										
2016	09	04	72	60		0.00		0.0										
2016	09	05	74	60		0.07		0.0										
2016	09	06	72	63		0.14		0.0										
2016	09	07	76	65		0.03		0.0										
2016	09	08	76	66		T		0.0										
2016	09	09	93	73		T		0.0										
2016	09	10	78	70		0.01		0.0										
2016	09	11	83	63		0.03		0.0										
2016	09	12	72	59		0.00		0.0										
2016	09	13	83	60		0.00		0.0										
2016	09	14	90	62		0.06		0.0										
2016	09	15	66	57		0.00		0.0										
2016	09	16	70	54		0.00		0.0										
2016	09	17	78	55		0.00		0.0										
2016	09	18	82	66		T		0.0										
2016	09	19	74	67		0.33		0.0										
2016	09	20	75	67		0.00		0.0										
2016	09	21	83	69		0.00		0.0										
2016	09	22	79	61		0.00		0.0										
2016	09	23	82	56		0.34		0.0										
2016	09	24	67	54		T		0.0										
2016	09	25	66	49		0.00		0.0										
2016	09	26	64	48		0.00		0.0										
2016	09	27	72	59		0.22		0.0										
2016	09	28	61	56		T		0.0										
2016	09	29	60	54		0.00		0.0										
2016	09	30	62	56		0.13		0.0										
		Summary	74	61		1.38		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	10	01	59	54		0.71		0.0										
2016	10	02	57	53		0.03		0.0										
2016	10	03	68	55		0.00		0.0										
2016	10	04	63	50		T		0.0										
2016	10	05	60	48		0.00		0.0										
2016	10	06	67	49		0.00		0.0										
2016	10	07	68	53		0.00		0.0										
2016	10	08	68	52		0.01		0.0										
2016	10	09	65	48		1.84		0.0										
2016	10	10	59	45		0.00		0.0										
2016	10	11	59	44		0.00		0.0										
2016	10	12	62	48		0.00		0.0										
2016	10	13	72	51		T		0.0										
2016	10	14	60	46		0.00		0.0										
2016	10	15	56	42		0.00		0.0										
2016	10	16	71	46		0.00		0.0										
2016	10	17	75	62		T		0.0										
2016	10	18	69	57		0.14		0.0										
2016	10	19	81	62		0.00		0.0										
2016	10	20	62	56		0.08		0.0										
2016	10	21	75	59		1.11		0.0										
2016	10	22	65	44		0.15		0.0										
2016	10	23	58	44		0.00		0.0										
2016	10	24	61	46		0.00		0.0										
2016	10	25	49	39		0.00		0.0										
2016	10	26	49	37		0.00		0.0										
2016	10	27	49	34		0.65		0.0										
2016	10	28	55	44		0.61		0.0										
2016	10	29	57	42		T		0.0										
2016	10	30	65	46		0.13		0.0										
2016	10	31	52	38		0.00		0.0										
		Summary	62	48		5.46		0.0										

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Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	11	01	51	34		0.00		0.0										
2016	11	02	70	45		0.00		0.0										
2016	11	03	64	51		0.08		0.0										
2016	11	04	57	39		0.00		0.0										
2016	11	05	57	35		0.00		0.0										
2016	11	06	52	43		0.09		T										
2016	11	07	47	36		0.00		0.0										
2016	11	08	59	38		0.00		0.0										
2016	11	09	62	44		0.01		0.0										
2016	11	10	53	39		T		0.0										
2016	11	11	60	38		0.00		0.0										
2016	11	12	48	34		0.00		0.0										
2016	11	13	60	41		0.00		0.0										
2016	11	14	66	39		0.00		0.0										
2016	11	15	58	46		0.99		0.0										
2016	11	16	55	51		0.03		0.0										
2016	11	17	57	45		0.00		0.0										
2016	11	18	63	43		0.00		0.0										
2016	11	19	51	43		T		0.0										
2016	11	20	49	32		0.08		T										
2016	11	21	38	30		T		T										
2016	11	22	43	32		0.00		0.0										
2016	11	23	45	33		0.00		0.0										
2016	11	24	44	33		0.05		0.0										
2016	11	25	48	39		0.03		0.0										
2016	11	26	47	38		0.00		0.0										
2016	11	27	46	36		0.00		0.0										
2016	11	28	46	33		0.00		0.0										
2016	11	29	58	33		0.43		0.0										
2016	11	30	52	42		0.91		0.0										
		Summary	54	39		2.70		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2016	12	01	57	43		0.31		0.0										
2016	12	02	51	38		0.00		0.0										
2016	12	03	44	35		0.00		0.0										
2016	12	04	42	31		0.00		0.0										
2016	12	05	40	31		0.14		0.3										
2016	12	06	44	34		0.00		0.0										
2016	12	07	42	36		0.08		T										
2016	12	08	43	34		0.00		0.0										
2016	12	09	37	25		0.00		0.0										
2016	12	10	29	21		0.00		0.0										
2016	12	11	35	20		0.02		0.2										
2016	12	12	44	29		0.42		0.7										
2016	12	13	43	35		0.00		0.0										
2016	12	14	42	27		0.00		0.0										
2016	12	15	32	14		T		T										
2016	12	16	21	4		0.00		0.0										
2016	12	17	36	21		0.53		4.3										
2016	12	18	57	33		0.11		0.0										
2016	12	19	33	19		0.00		0.0										
2016	12	20	34	18		0.00		0.0										
2016	12	21	45	29		0.00		0.0										
2016	12	22	39	31		0.02		T										
2016	12	23	46	35		0.00		0.0										
2016	12	24	45	35		0.38		0.0										
2016	12	25	45	27		0.00		0.0										
2016	12	26	48	24		0.01		0.0										
2016	12	27	58	39		T		0.0										
2016	12	28	42	32		0.00		0.0										
2016	12	29	43	29		1.16		0.4										
2016	12	30	41	30		T		T										
2016	12	31	42	26		0.07		0.0										
		Summary	42	29		3.25		5.9										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	01	01	44	33		0.07		0.0										
2017	01	02	41	28		T		0.0										
2017	01	03	44	40		0.89		0.0										
2017	01	04	48	33		0.06		T										
2017	01	05	34	27		0.00		0.0										
2017	01	06	31	24		0.06		1.1										
2017	01	07	24	17		0.53		7.0										
2017	01	08	22	13		0.01		0.2										
2017	01	09	20	11		0.00		0.0										
2017	01	10	39	16		0.14		0.0										
2017	01	11	55	39		0.09		0.0										
2017	01	12	61	41		0.15		0.0										
2017	01	13	58	25		0.00		0.0										
2017	01	14	31	18		0.00		0.0										
2017	01	15	37	27		0.00		0.0										
2017	01	16	42	23		0.00		0.0										
2017	01	17	42	32		0.30		T										
2017	01	18	40	32		0.36		0.0										
2017	01	19	46	31		0.00		0.0										
2017	01	20	40	34		0.00		0.0										
2017	01	21	55	37		0.00		0.0										
2017	01	22	48	39		0.06		0.0										
2017	01	23	40	35		0.31		T										
2017	01	24	42	35		1.09		T										
2017	01	25	44	36		0.02		0.0										
2017	01	26	51	37		0.05		0.0										
2017	01	27	44	36		T		T										
2017	01	28	40	32		0.00		0.0										
2017	01	29	43	30		0.00		0.0										
2017	01	30	36	24		0.00		0.0										
2017	01	31	28	20		0.06		0.6										
		Summary	41	29		4.25		8.9										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	02	01	43	27		0.05		0.8										
2017	02	02	40	29		0.00		0.0										
2017	02	03	33	25		0.00		0.0										
2017	02	04	33	21		0.00		0.0										
2017	02	05	44	26		0.00		0.0										
2017	02	06	39	32		0.00		0.0										
2017	02	07	38	33		0.44		1.2										
2017	02	08	52	25		0.02		0.0										
2017	02	09	39	11		1.25		10.9										
2017	02	10	25	11		T		T										
2017	02	11	30	15		0.21		3.2										
2017	02	12	35	19		0.77		1.5										
2017	02	13	34	24		0.09		2.2										
2017	02	14	34	22		0.00		0.0										
2017	02	15	40	27		0.22		0.1										
2017	02	16	35	27		0.07		1.6										
2017	02	17	41	23		0.00		0.0										
2017	02	18	49	26		0.00		0.0										
2017	02	19	59	39		0.00		0.0										
2017	02	20	48	33		0.00		0.0										
2017	02	21	40	30		0.00		0.0										
2017	02	22	56	38		0.00		0.0										
2017	02	23	68	39		0.00		0.0										
2017	02	24	73	46		0.00		0.0										
2017	02	25	69	49		0.10		0.0										
2017	02	26	49	32		0.00		0.0										
2017	02	27	55	30		0.00		0.0										
2017	02	28	51	39		0.00		0.0										
		Summary	45	29		3.22		21.5										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	03	01	63	48		0.02		0.0										
2017	03	02	58	31		0.00		0.0										
2017	03	03	36	20		T		0.1										
2017	03	04	21	10		0.00		T										
2017	03	05	32	9		0.00		0.0										
2017	03	06	37	16		0.00		0.0										
2017	03	07	48	30		0.02		0.0										
2017	03	08	57	43		0.05		0.0										
2017	03	09	51	38		0.00		0.0										
2017	03	10	38	23		0.20		2.6										
2017	03	11	23	10		0.02		0.2										
2017	03	12	27	9		0.00		0.0										
2017	03	13	34	14		0.00		0.0										
2017	03	14	38	27		1.62		6.6										
2017	03	15	28	19		0.00		0.0										
2017	03	16	35	22		0.00		0.0										
2017	03	17	42	27		0.00		0.0										
2017	03	18	36	24		0.00		0.0										
2017	03	19	38	31		0.01		T										
2017	03	20	53	32		0.00		0.0										
2017	03	21	53	40		0.00		0.0										
2017	03	22	43	18		T		T										
2017	03	23	38	18		0.00		0.0										
2017	03	24	47	27		0.03		T										
2017	03	25	47	34		0.08		0.0										
2017	03	26	41	30		T		0.0										
2017	03	27	44	36		0.48		0.0										
2017	03	28	40	36		0.72		0.0										
2017	03	29	47	37		0.06		0.0										
2017	03	30	48	34		0.00		0.0										
2017	03	31	40	33		0.87		0.6										
		Summary	41	27		4.18		10.1										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	04	01	38	33		1.56		1.2										
2017	04	02	57	33		T		T										
2017	04	03	55	38		0.00		0.0										
2017	04	04	43	38		0.68		0.0										
2017	04	05	41	37		T		0.0										
2017	04	06	53	37		1.36		0.0										
2017	04	07	54	41		T		0.0										
2017	04	08	49	38		0.00		0.0										
2017	04	09	66	40		0.00		0.0										
2017	04	10	76	44		0.00		0.0										
2017	04	11	84	52		0.00		0.0										
2017	04	12	60	48		0.02		0.0										
2017	04	13	59	45		0.00		0.0										
2017	04	14	60	44		0.00		0.0										
2017	04	15	70	42		T		0.0										
2017	04	16	86	57		T		0.0										
2017	04	17	75	49		0.00		0.0										
2017	04	18	51	39		0.00		0.0										
2017	04	19	56	39		0.07		0.0										
2017	04	20	55	44		0.01		0.0										
2017	04	21	45	44		0.51		0.0										
2017	04	22	45	43		0.05		0.0										
2017	04	23	58	41		0.00		0.0										
2017	04	24	64	45		0.00		0.0										
2017	04	25	50	45		0.89		0.0										
2017	04	26	56	45		0.56		0.0										
2017	04	27	59	50		0.00		0.0										
2017	04	28	82	51		0.01		0.0										
2017	04	29	84	59		0.00		0.0										
2017	04	30	64	45		0.01		0.0										
		Summary	60	44		5.73		1.2										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	05	01	48	45		T		0.0										
2017	05	02	66	44		0.19		0.0										
2017	05	03	64	49		0.00		0.0										
2017	05	04	56	46		0.00		0.0										
2017	05	05	51	47		0.64		0.0										
2017	05	06	65	49		0.10		0.0										
2017	05	07	64	50		0.00		0.0										
2017	05	08	55	44		T		0.0										
2017	05	09	52	42		T		0.0										
2017	05	10	55	47		0.00		0.0										
2017	05	11	54	48		0.00		0.0										
2017	05	12	53	47		0.01		0.0										
2017	05	13	53	45		0.02		0.0										
2017	05	14	51	46		0.95		0.0										
2017	05	15	61	47		0.07		0.0										
2017	05	16	81	55		0.00		0.0										
2017	05	17	92	60		T		0.0										
2017	05	18	95	71		0.05		0.0										
2017	05	19	90	58		0.01		0.0										
2017	05	20	59	52		0.00		0.0										
2017	05	21	61	48		0.00		0.0										
2017	05	22	56	50		0.12		0.0										
2017	05	23	68	53		T		0.0										
2017	05	24	64	54		0.00		0.0										
2017	05	25	55	50		0.63		0.0										
2017	05	26	60	49		0.55		0.0										
2017	05	27	61	53		0.00		0.0										
2017	05	28	67	54		0.00		0.0										
2017	05	29	54	49		0.05		0.0										
2017	05	30	59	49		0.00		0.0										
2017	05	31	68	54		0.06		0.0										
Summary			63	50		3.45		0.0										

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	06	01	79	56		0.16		0.0										
2017	06	02	72	51		0.01		0.0										
2017	06	03	69	52		T		0.0										
2017	06	04	70	54		0.18		0.0										
2017	06	05	57	52		0.59		0.0										
2017	06	06	52	47		0.80		0.0										
2017	06	07	62	50		0.04		0.0										
2017	06	08	71	51		0.00		0.0										
2017	06	09	79	55		0.00		0.0										
2017	06	10	85	61		0.00		0.0										
2017	06	11	92	66		0.00		0.0										
2017	06	12	95	71		0.00		0.0										
2017	06	13	95	72		0.53		0.0										
2017	06	14	73	59		T		0.0										
2017	06	15	75	57		0.00		0.0										
2017	06	16	71	57		2.13		0.0										
2017	06	17	69	58		0.02		0.0										
2017	06	18	84	68		T		0.0										
2017	06	19	85	70		0.03		0.0										
2017	06	20	86	68		0.13		0.0										
2017	06	21	84	67		0.00		0.0										
2017	06	22	84	65		0.00		0.0										
2017	06	23	90	65		T		0.0										
2017	06	24	88	71		0.08		0.0										
2017	06	25	85	65		T		0.0										
2017	06	26	80	62		0.00		0.0										
2017	06	27	77	58		0.08		0.0										
2017	06	28	79	58		0.00		0.0										
2017	06	29	79	63		T		0.0										
2017	06	30	84	68		0.07		0.0										
		Summary	78	61		4.85		0.0										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	07	01	88	69		0.11		0.0										
2017	07	02	90	71		T		0.0										
2017	07	03	87	71		T		0.0										
2017	07	04	82	67		0.00		0.0										
2017	07	05	79	62		0.00		0.0										
2017	07	06	83	61		0.00		0.0										
2017	07	07	70	62		0.30		0.0										
2017	07	08	87	63		0.40		0.0										
2017	07	09	83	66		0.00		0.0										
2017	07	10	87	65		T		0.0										
2017	07	11	83	67		0.17		0.0										
2017	07	12	82	69		1.33		0.0										
2017	07	13	70	58		0.14		0.0										
2017	07	14	67	60		0.00		0.0										
2017	07	15	73	62		T		0.0										
2017	07	16	81	69		0.00		0.0										
2017	07	17	83	68		0.00		0.0										
2017	07	18	82	68		0.12		0.0										
2017	07	19	93	72		0.00		0.0										
2017	07	20	92	71		T		0.0										
2017	07	21	91	73		0.00		0.0										
2017	07	22	83	73		T		0.0										
2017	07	23	77	64		0.00		0.0										
2017	07	24	65	57		1.41		0.0										
2017	07	25	65	56		0.01		0.0										
2017	07	26	77	59		0.00		0.0										
2017	07	27	75	63		0.04		0.0										
2017	07	28	82	66		0.00		0.0										
2017	07	29	71	60		0.00		0.0										
2017	07	30	73	60		0.00		0.0										
2017	07	31	80	61		0.00		0.0										
Summary			80	65		4.03		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	08	01	80	67		0.00		0.0										
2017	08	02	81	68		0.96		0.0										
2017	08	03	84	66		T		0.0										
2017	08	04	85	68		0.00		0.0										
2017	08	05	77	67		0.16		0.0										
2017	08	06	79	63		0.00		0.0										
2017	08	07	78	64		T		0.0										
2017	08	08	75	62		0.00		0.0										
2017	08	09	85	65		0.00		0.0										
2017	08	10	82	66		0.00		0.0										
2017	08	11	77	63		0.00		0.0										
2017	08	12	76	63		0.10		0.0										
2017	08	13	86	70		0.00		0.0										
2017	08	14	78	63		0.00		0.0										
2017	08	15	80	66		0.00		0.0										
2017	08	16	85	66		0.00		0.0										
2017	08	17	83	63		0.00		0.0										
2017	08	18	81	65		0.24		0.0										
2017	08	19	74	65		0.01		0.0										
2017	08	20	85	72		0.00		0.0										
2017	08	21	87	69		0.00		0.0										
2017	08	22	91	70		0.00		0.0										
2017	08	23	84	69		0.04		0.0										
2017	08	24	81	64		0.00		0.0										
2017	08	25	76	63		T		0.0										
2017	08	26	74	60		0.00		0.0										
2017	08	27	71	58		0.00		0.0										
2017	08	28	72	57		0.00		0.0										
2017	08	29	68	58		T		0.0										
2017	08	30	72	59		0.07		0.0										
2017	08	31	79	60		0.00		0.0										
		Summary	80	64		1.58		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	09	01	69	53		0.00		0.0										
2017	09	02	68	53		0.00		0.0										
2017	09	03	64	57		0.28		0.0										
2017	09	04	81	58		0.00		0.0										
2017	09	05	88	65		0.00		0.0										
2017	09	06	79	62		0.22		0.0										
2017	09	07	76	60		0.60		0.0										
2017	09	08	74	59		0.00		0.0										
2017	09	09	68	55		0.01		0.0										
2017	09	10	69	56		0.00		0.0										
2017	09	11	80	55		0.00		0.0										
2017	09	12	86	61		0.00		0.0										
2017	09	13	78	64		0.03		0.0										
2017	09	14	84	67		0.33		0.0										
2017	09	15	77	66		0.21		0.0										
2017	09	16	73	62		0.00		0.0										
2017	09	17	73	61		0.00		0.0										
2017	09	18	68	63		T		0.0										
2017	09	19	66	63		0.04		0.0										
2017	09	20	72	63		0.27		0.0										
2017	09	21	72	63		0.00		0.0										
2017	09	22	63	57		0.16		0.0										
2017	09	23	76	60		0.03		0.0										
2017	09	24	79	61		0.00		0.0										
2017	09	25	78	64		0.00		0.0										
2017	09	26	80	63		0.00		0.0										
2017	09	27	86	65		0.00		0.0										
2017	09	28	78	57		0.00		0.0										
2017	09	29	68	52		0.00		0.0										
2017	09	30	59	50		1.55		0.0										
		Summary	74	60		3.73		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	10	01	66	47		0.00		0.0										
2017	10	02	66	51		0.00		0.0										
2017	10	03	65	51		0.00		0.0										
2017	10	04	77	53		0.00		0.0										
2017	10	05	80	64		0.00		0.0										
2017	10	06	78	60		T		0.0										
2017	10	07	76	60		0.00		0.0										
2017	10	08	75	68		0.11		0.0										
2017	10	09	75	67		0.27		0.0										
2017	10	10	79	65		0.00		0.0										
2017	10	11	68	57		0.01		0.0										
2017	10	12	58	48		T		0.0										
2017	10	13	62	47		0.00		0.0										
2017	10	14	64	57		0.10		0.0										
2017	10	15	75	59		0.00		0.0										
2017	10	16	70	44		0.00		0.0										
2017	10	17	58	40		0.00		0.0										
2017	10	18	72	47		0.00		0.0										
2017	10	19	74	52		0.00		0.0										
2017	10	20	71	58		0.00		0.0										
2017	10	21	78	51		0.00		0.0										
2017	10	22	66	54		0.00		0.0										
2017	10	23	64	54		0.00		0.0										
2017	10	24	75	62		0.07		0.0										
2017	10	25	70	58		1.29		0.0										
2017	10	26	62	49		0.35		0.0										
2017	10	27	62	47		0.00		0.0										
2017	10	28	67	46		0.00		0.0										
2017	10	29	61	56		1.00		0.0										
2017	10	30	65	51		0.94		0.0										
2017	10	31	58	46		0.00		0.0										
Summary			69	54		4.14		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	11	01	53	41		0.00		0.0										
2017	11	02	71	52		0.00		0.0										
2017	11	03	75	51		0.01		0.0										
2017	11	04	52	43		0.00		0.0										
2017	11	05	60	50		T		0.0										
2017	11	06	64	50		0.08		0.0										
2017	11	07	50	37		0.13		0.0										
2017	11	08	45	37		0.03		0.0										
2017	11	09	48	34		0.00		0.0										
2017	11	10	49	24		0.02		0.0										
2017	11	11	37	23		0.00		0.0										
2017	11	12	44	29		0.00		0.0										
2017	11	13	43	37		0.13		0.0										
2017	11	14	44	37		0.00		0.0										
2017	11	15	44	34		0.00		0.0										
2017	11	16	50	38		0.19		0.0										
2017	11	17	44	34		0.00		0.0										
2017	11	18	52	30		0.09		0.0										
2017	11	19	60	38		0.23		0.0										
2017	11	20	42	35		T		T										
2017	11	21	59	35		0.00		0.0										
2017	11	22	52	38		0.89		0.0										
2017	11	23	43	32		0.00		0.0										
2017	11	24	50	31		0.00		0.0										
2017	11	25	58	38		0.00		0.0										
2017	11	26	51	37		0.00		0.0										
2017	11	27	47	27		0.00		0.0										
2017	11	28	47	22		0.00		0.0										
2017	11	29	61	38		0.00		0.0										
2017	11	30	45	30		0.00		0.0										
		Summary	51	36		1.80		0.0										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	12	01	51	38		0.09		0.0										
2017	12	02	43	34		0.00		0.0										
2017	12	03	44	34		0.00		0.0										
2017	12	04	43	33		0.00		0.0										
2017	12	05	59	38		0.08		0.0										
2017	12	06	58	36		0.46		0.0										
2017	12	07	47	33		0.00		0.0										
2017	12	08	39	31		0.00		0.0										
2017	12	09	37	31		0.66		5.8										
2017	12	10	38	31		0.03		0.3										
2017	12	11	39	32		0.00		0.0										
2017	12	12	46	33		0.04		0.0										
2017	12	13	36	22		0.00		0.0										
2017	12	14	30	19		T		T										
2017	12	15	27	17		T		T										
2017	12	16	34	22		0.00		0.0										
2017	12	17	31	20		0.00		0.0										
2017	12	18	38	22		T		T										
2017	12	19	51	34		0.00		0.0										
2017	12	20	47	31		0.00		0.0										
2017	12	21	33	26		0.00		0.0										
2017	12	22	38	23		0.10		0.1										
2017	12	23	43	25		0.58		T										
2017	12	24	39	32		0.00		0.0										
2017	12	25	38	23		0.44		2.9										
2017	12	26	27	19		0.00		0.0										
2017	12	27	20	12		0.00		0.0										
2017	12	28	12	5		0.00		0.0										
2017	12	29	14	2		0.00		0.0										
2017	12	30	18	6		0.01		0.1										
2017	12	31	13	4		0.00		0.0										
		Summary	37	25		2.49		9.2										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 10 ft. Lat: 42.3606° N Lon: -71.0098° W

Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	01	01	13	0		0.00		0.0										
2018	01	02	19	4		0.00		0.0										
2018	01	03	29	16		0.00		0.0										
2018	01	04	30	22		1.35		13.4										
2018	01	05	24	6		0.00		0.0										
2018	01	06	12	1		0.00		0.0										
2018	01	07	17	-2		0.00		0.0										
2018	01	08	35	17		T		T										
2018	01	09	43	31		0.00		0.0										
2018	01	10	36	25		0.00		0.0										
2018	01	11	51	33		0.00		0.0										
2018	01	12	60	39		0.62		0.0										
2018	01	13	61	19		1.24		0.0										
2018	01	14	23	14		0.00		0.0										
2018	01	15	21	12		T		0.3										
2018	01	16	33	20		0.00		0.0										
2018	01	17	34	31		0.21		1.7										
2018	01	18	32	21		0.00		0.0										
2018	01	19	34	23		0.00		0.0										
2018	01	20	47	29		0.00		0.0										
2018	01	21	49	34		0.00		0.0										
2018	01	22	39	34		0.06		0.0										
2018	01	23	55	32		1.26		0.0										
2018	01	24	42	24		0.00		0.0										
2018	01	25	30	21		0.00		0.0										
2018	01	26	34	19		0.00		0.0										
2018	01	27	53	25		0.00		0.0										
2018	01	28	52	43		0.03		0.0										
2018	01	29	43	28		T		0.1										
2018	01	30	31	20		0.15		2.3										
2018	01	31	30	18		0.00		0.0										
		Summary	36	21		4.92		17.8										

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Station: **BOSTON LOGAN INTERNATIONAL AIRPORT, MA US USW00014739**

Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	02	01	46	30		0.04		0.0										
2018	02	02	38	12		0.25		0.1										
2018	02	03	28	10		0.00		0.0										
2018	02	04	43	26		0.29		0.0										
2018	02	05	43	24		0.36		0.0										
2018	02	06	34	22		T		T										
2018	02	07	43	23		0.65		2.1										
2018	02	08	34	22		0.00		0.0										
2018	02	09	32	22		0.00		0.0										
2018	02	10	52	30		0.16		0.0										
2018	02	11	49	38		0.69		0.0										
2018	02	12	48	33		0.00		0.0										
2018	02	13	33	25		0.00		0.0										
2018	02	14	47	28		0.00		0.0										
2018	02	15	49	35		T		0.0										
2018	02	16	54	34		0.02		0.0										
2018	02	17	35	27		0.17		1.9										
2018	02	18	44	32		0.35		3.7										
2018	02	19	50	26		0.06		0.0										
2018	02	20	70	42		0.01		0.0										
2018	02	21	72	41		0.00		0.0										
2018	02	22	55	32		0.08		0.5										
2018	02	23	40	31		0.12		0.0										
2018	02	24	55	37		0.00		0.0										
2018	02	25	41	37		0.51		T										
2018	02	26	51	38		0.00		0.0										
2018	02	27	53	36		0.00		0.0										
2018	02	28	60	39		0.01		0.0										
		Summary	46	30		3.77		8.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	03	01	60	40		0.00		0.0										
2018	03	02	43	35		2.30		T										
2018	03	03	43	37		T		0.0										
2018	03	04	41	36		T		T										
2018	03	05	44	32		0.05		0.6										
2018	03	06	37	33		T		T										
2018	03	07	39	33		0.55		2.5										
2018	03	08	38	31		0.71		3.9										
2018	03	09	37	29		T		T										
2018	03	10	40	33		T		T										
2018	03	11	44	31		0.00		0.0										
2018	03	12	42	29		T		0.0										
2018	03	13	38	28		1.15		14.5										
2018	03	14	41	29		0.03		0.3										
2018	03	15	43	32		0.01		0.1										
2018	03	16	38	28		0.00		0.0										
2018	03	17	42	19		0.00		0.0										
2018	03	18	33	16		0.00		0.0										
2018	03	19	38	21		0.00		0.0										
2018	03	20	39	24		0.00		0.0										
2018	03	21	39	32		T		0.0										
2018	03	22	42	32		0.09		1.3										
2018	03	23	42	35		0.00		0.0										
2018	03	24	46	34		0.01		T										
2018	03	25	39	32		0.07		0.1										
2018	03	26	40	29		0.00		0.0										
2018	03	27	42	28		0.00		0.0										
2018	03	28	54	36		0.01		0.0										
2018	03	29	50	37		0.01		0.0										
2018	03	30	64	43		0.08		0.0										
2018	03	31	57	39		0.00		0.0										
		Summary	43	31		5.07		23.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	04	01	59	37		0.00		0.0										
2018	04	02	40	31		0.11		0.7										
2018	04	03	48	32		0.47		0.0										
2018	04	04	58	39		0.20		0.0										
2018	04	05	43	30		0.00		0.0										
2018	04	06	43	29		0.21		0.6										
2018	04	07	47	35		0.01		0.0										
2018	04	08	42	32		0.00		0.0										
2018	04	09	46	30		0.00		0.0										
2018	04	10	41	35		T		0.0										
2018	04	11	45	30		0.00		0.0										
2018	04	12	55	36		0.06		0.0										
2018	04	13	69	44		T		0.0										
2018	04	14	52	38		0.00		0.0										
2018	04	15	39	33		0.04		T										
2018	04	16	53	36		1.57		0.0										
2018	04	17	50	40		0.00		0.0										
2018	04	18	53	36		0.00		0.0										
2018	04	19	44	36		0.23		T										
2018	04	20	53	36		0.00		0.0										
2018	04	21	59	39		0.00		0.0										
2018	04	22	62	42		0.00		0.0										
2018	04	23	58	43		0.00		0.0										
2018	04	24	69	42		0.00		0.0										
2018	04	25	56	47		0.72		0.0										
2018	04	26	68	50		0.21		0.0										
2018	04	27	57	46		0.54		0.0										
2018	04	28	70	46		0.00		0.0										
2018	04	29	60	43		0.05		0.0										
2018	04	30	48	40		0.20		0.0										
		Summary	53	38		4.62		1.3										

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	05	01	67	44		0.00		0.0										
2018	05	02	89	58		0.00		0.0										
2018	05	03	90	61		0.09		0.0										
2018	05	04	82	57		T		0.0										
2018	05	05	75	58		0.00		0.0										
2018	05	06	67	50		0.19		0.0										
2018	05	07	61	48		0.00		0.0										
2018	05	08	60	45		0.00		0.0										
2018	05	09	63	46		T		0.0										
2018	05	10	71	49		0.00		0.0										
2018	05	11	70	52		0.00		0.0										
2018	05	12	53	49		0.21		0.0										
2018	05	13	54	48		0.00		0.0										
2018	05	14	69	49		0.00		0.0										
2018	05	15	85	58		1.00		0.0										
2018	05	16	62	50		T		0.0										
2018	05	17	71	51		0.00		0.0										
2018	05	18	65	47		0.00		0.0										
2018	05	19	55	46		0.20		0.0										
2018	05	20	81	54		0.08		0.0										
2018	05	21	80	57		0.00		0.0										
2018	05	22	67	54		0.03		0.0										
2018	05	23	84	54		0.02		0.0										
2018	05	24	68	53		0.00		0.0										
2018	05	25	88	54		0.00		0.0										
2018	05	26	89	61		T		0.0										
2018	05	27	61	50		0.02		0.0										
2018	05	28	59	50		0.06		0.0										
2018	05	29	85	58		0.00		0.0										
2018	05	30	69	60		0.00		0.0										
2018	05	31	83	56		0.00		0.0										
		Summary	72	52		1.90		0.0										

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"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

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Observation Time Temperature: Unknown Observation Time Precipitation: 2400

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		"Soil Temperature (F)"					
			"24 Hrs. Ending at Observation Time"			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	06	01	79	64		0.01		0.0										
2018	06	02	81	57		0.01		0.0										
2018	06	03	60	50		0.00		0.0										
2018	06	04	53	49		0.62		0.0										
2018	06	05	61	49		0.34		0.0										
2018	06	06	62	53		0.00		0.0										
2018	06	07	72	54		0.00		0.0										
2018	06	08	81	55		T		0.0										
2018	06	09	80	62		0.00		0.0										
2018	06	10	72	60		0.00		0.0										
2018	06	11	64	56		0.00		0.0										
2018	06	12	80	54		0.00		0.0										
2018	06	13	77	59		T		0.0										
2018	06	14	79	57		0.00		0.0										
2018	06	15	64	54		T		0.0										
2018	06	16	85	56		0.00		0.0										
2018	06	17	81	62		0.00		0.0										
2018	06	18	89	66		0.13		0.0										
2018	06	19	84	68		0.01		0.0										
2018	06	20	85	63		0.00		0.0										
2018	06	21	80	64		0.00		0.0										
2018	06	22	70	60		0.00		0.0										
2018	06	23	65	60		T		0.0										
2018	06	24	77	59		0.26		0.0										
2018	06	25	74	61		0.33		0.0										
2018	06	26	79	60		0.00		0.0										
2018	06	27	80	63		0.09		0.0										
2018	06	28	76	65		1.16		0.0										
2018	06	29	90	72		0.00		0.0										
2018	06	30	92	75		0.00		0.0										
		Summary	76	60		2.96		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCEI's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

APPENDIX H
PUBLIC NOTIFICATION CORRESPONDENCE

10 State Street, Suite 100
Woburn, MA 01801
781.932.9400 | oneatlas.com

August 22, 2023

Andrew P. Flanagan, Town Manager
Town of Andover
36 Bartlet Street
Andover, Massachusetts 01810

SUBJECT: Availability of a Permanent Solution Statement
309 Lowell Street , Andover, Massachusetts 01810
MassDEP Release Tracking No. 3-3072
Atlas Project No.: 9521488019

Dear Mr. Flanagan:

Global Companies LLC submitted a Permanent Solution Statement to the Massachusetts Department of Environmental Protection (MassDEP) on August 22, 2023. Pursuant to the Massachusetts Contingency Plan (MCP) as set forth at 310 CMR 40.1403(3)(f), a copy of the Permanent Solution Statement may be obtained from the MassDEP Data Portal at https://eeaonline.eea.state.ma.us/portal#!/search/wastesite and entering RTN 3-0003072.

Please note that local officials have the right to request additional Public Involvement Activities under 310 CMR 40.1403(9).

Please contact Pat Corcoran if you have questions regarding the information in this letter.

Respectfully submitted,

ATLAS TECHNICAL CONSULTANTS LLC

Patrick D. Corcoran, LSP
Senior Project Manager
Mobile: 401.384.0042
Email: patrick.corcoran@oneatlas.com

Distribution: MassDEP BWSC Northeast Regional Office
Global Companies LLC

File: Andover Town Manager Letter

10 State Street, Suite 100
Woburn, MA 01801
781.932.9400 | oneatlas.com

August 22, 2023

Dr. Pamela Linzer, Chair
City of Andover Board of Health
36 Bartlet Street
Andover, Massachusetts 01810

SUBJECT: Availability of a Permanent Solution Statement
309 Lowell Street , Andover, Massachusetts 01810
MassDEP Release Tracking No. 3-3072
Atlas Project No.: 9521488019

Dear Dr. Linzer:

Global Companies LLC submitted a Permanent Solution Statement to the Massachusetts Department of Environmental Protection (MassDEP) on August 22, 2023. Pursuant to the Massachusetts Contingency Plan (MCP) as set forth at 310 CMR 40.1403(3)(f), a copy of the Permanent Solution Statement may be obtained from the MassDEP Data Portal at https://eeaonline.eea.state.ma.us/portal#!/search/wastesite and entering RTN 3-0003072.

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Respectfully submitted,

ATLAS TECHNICAL CONSULTANTS LLC

Patrick D. Corcoran, LSP
Senior Project Manager
Mobile: 401.384.0042
Email: patrick.corcoran@oneatlas.com

Distribution: MassDEP BWSC Northeast Regional Office
Global Companies LLC

File: Andover Board of Health PS Letter